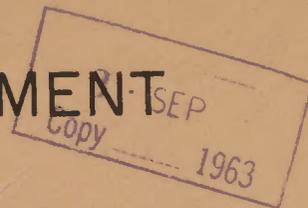


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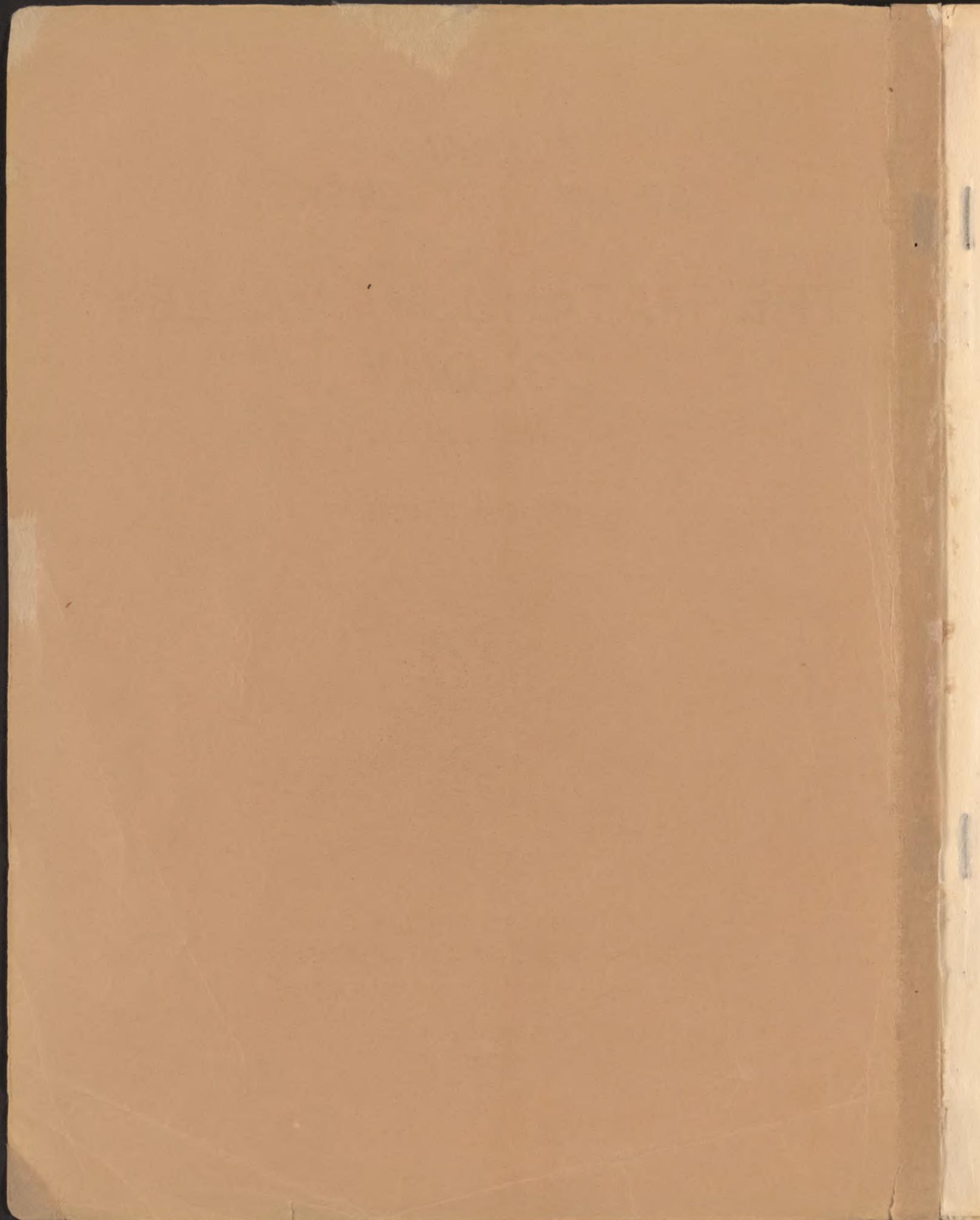
KIRK H. STONE



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WASHINGTON

- 1950 -



UNITED STATES DEPARTMENT OF THE INTERIOR

OSCAR L. CHAPMAN, SECRETARY

BUREAU OF LAND MANAGEMENT

MARION CLAWSON, DIRECTOR

ALASKAN GROUP SETTLEMENT: THE MATANUSKA VALLEY COLONY

By

KIRK H. STONE

UNIVERSITY OF WISCONSIN



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FOREWORD

This study of the Matanuska Colony project in Alaska was undertaken for the Interior-Agriculture Committee on Group Settlement in Alaska. The study is one of several which were made at the request of the Committee, covering such subjects as land use capability, farm management and production, and marketing.

The Committee on Group Settlement in Alaska consists of Harlan H. Barrows, Consultant, Chairman; E. H. Wiecking and O. L. Mimms, Department of Agriculture; Marion Clawson and Robert K. Coote, Department of the Interior.

While prepared primarily for the use of the Committee, the report contains such a wealth of information that it will be of interest and of value to all those concerned with the settlement and development of Alaska. It is recommended as a factual, objective appraisal of the Matanuska project. The author accepts responsibility for the accuracy of the data and the conclusions and recommendations are his own.

It should be pointed out that subsequent to the time the report was written, several of the recommended scientific investigations have been undertaken and that present knowledge of certain areas, particularly the Kenai-Kasilof area on the Kenai Peninsula, is much more adequate than indicated in the report.

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MEMORANDUM

This study of the National Defense project in Alaska was undertaken for the Inter-Departmental Committee on Alaska Settlement in Alaska. The study is one of several which were made at the request of the Committee, covering such subjects as land use capability, farm management and production, and marketing.

The Committee on Alaska Settlement in Alaska consists of Nathan S. Pearson, Chairman; E. H. Wisking and O. E. Munn, Department of Agriculture; Nathan Clawson and Robert A. Cooke, Department of the Interior.

While prepared primarily for the use of the Committee, the report contains such a wealth of information that it will be of interest and of value to all those concerned with the settlement and development of Alaska. It is recommended as a factual, objective appraisal of the Alaska project. The author accepts responsibility for the accuracy of the data and the conclusions and recommendations are his own.

It should be pointed out that subsequent to the time the report was written, several of the recommended scientific investigations have been completed and that present knowledge of certain areas, particularly the Kuskokwim area on the lower peninsula, is much more adequate than indicated in the report.

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PREFACE

Let's settle Alaska! This statement has been the theme of thinking about the Territory since about 1900. In 1935 the Matanuska Valley, in Southern Alaska, was colonized; otherwise there was little action until early in 1948. Then came a change in pace: Federal authorities proposed Alaskan group settlements, two thinly populated areas were reserved and preliminary studies of them were started, analysis of the Matanuska Valley Colony was completed, farm management and marketing studies were begun, and statements were made that the new settlement would be developed rapidly. To non-Alaskans, indeed even to some Alaskans, these signs of activity immediately provoke numerous questions. Can the difficulties of Alaskan isolation be reduced? Why settle the Territory at all? What should new settlers do for a living? Where can the new settlements be located? Why settlement by groups rather than by individuals?

Fortunately, the Federal government has had the experience, though bitter and too little, of planning for and carrying out group settlement at the Matanuska Valley. Analysis of the experience makes available knowledge of the past which may be added to facts about the present in order to plan for the future.

Can the difficulties of Alaskan isolation be reduced? The answer is that it is possible. Alaska's isolation is the starting point for all study of the Territory. Alaska is a westward projection from the northwestern corner of North America. About 80 percent of the country is north of 60° North Latitude. In distance by airline, Anchorage 1450 miles from Seattle and 2500 miles northwest of Minneapolis (Fig. 1). Within Alaska mountains separate and isolate the flatter areas. True, among United States' possessions Alaska is one of the richer in resources and is the largest. However, it is also one of our more remote holdings. To overcome isolation, both of the Territory as a whole and of its parts from one another, has been the main problem in the development of Alaska. The milestones in the history of Alaska since its discovery by the Russians in 1741 and its purchase by the United States in 1867 have been improvements in means of transportation. These changes were brought about by the use of boats, dog-sleds, wagons, automobiles, railroad cars, and airplanes. All of these means are used today but the first feeling a new Alaskan settler has is the remoteness of his position and he must learn to accept his isolation and the occasional accompanying discomforts.

Why settle the Territory? The answers have been that Alaska's isolation would be less serious if there were more permanent inhabitants, the natural populating of the Territory has resulted in too few inhabitants and the country needs more settlers for its military security and

commercial development. Many old Alaskans - sourdoughs - doubt whether an increased population would reduce the Territory's isolation. Within Alaska some population gaps might be filled in but large areas of rugged mountains and swampy plains are likely to remain unpopulated for a long time. A United States-Alaska railroad could be built but sourdoughs question the economic feasibility of such construction. Of course, many old Alaskans resent the possibility of increased settlement because they love the frontier aspects of much of the Territory and they want to preserve the country as it is.

Alaska is thinly populated. The people are in small clusters that form broken wavy lines on a map. At present the average population density is less than two per square mile. Yet, scientific and popular writers and speakers have been praising for years the opportunities for settlement in what has been called "our last frontier". ^{1/} A small population developed with the discoveries and exploitation of first furs, then gold, and later fish. Other people went north for the free land, because they liked living on a frontier, or because they felt they could make a fortune in a short time. All too few settled permanently though, and development of the Territory awaited a larger population.

Alaska needs more settlers to form a firm foundation for commercial progress. Too few laborers are available locally for present-day businesses, and, therefore, far too few for the development of territorial resources. In addition, commercial airlines now connect the United States and the Orient by way of Southern Alaska and the Aleutian Islands. These carriers require more heavily populated points for business and maintenance. It is the rapid and far-reaching transportation afforded by the airplane that is making Alaska more accessible to the world and, probably, will continue to do so.

It is said that there is need for more people for military reasons. During World War II it was difficult to carry out defensive and offensive operations in the Territory. It was a remote possession with only about 70,000 people scattered in an area one-fifth the size of the United States. At the present time, Alaska's position is of major

^{1/} See the references in the following general bibliographies on Alaska:

J. Wickersham, A Bibliography of Alaskan Literature, 1724-1924, Miscellaneous Publications of the Alaska Agricultural College and School of Mines, Vol. 1, Cordova, Alaska, 1927.

U.S. Library of Congress, Alaska, A Selected List of Recent References, Washington, D.C., 1943, mimeo.

U.S. National Resources Planning Board, Region X, Bibliography and Abstracts on the Subject of Agriculture in Alaska, 1867-1942, (Washington, D.C.), 1943, mimeo.

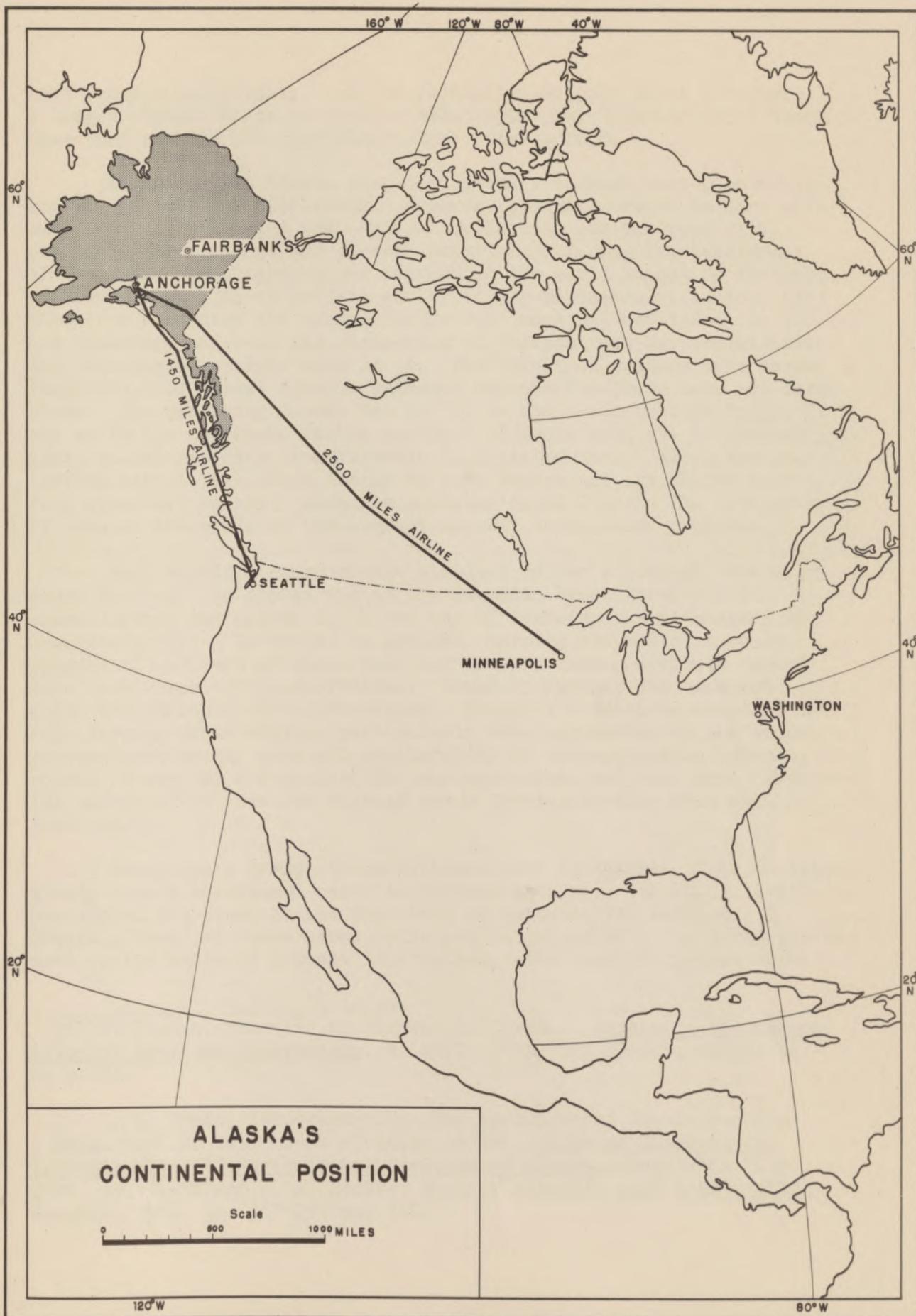
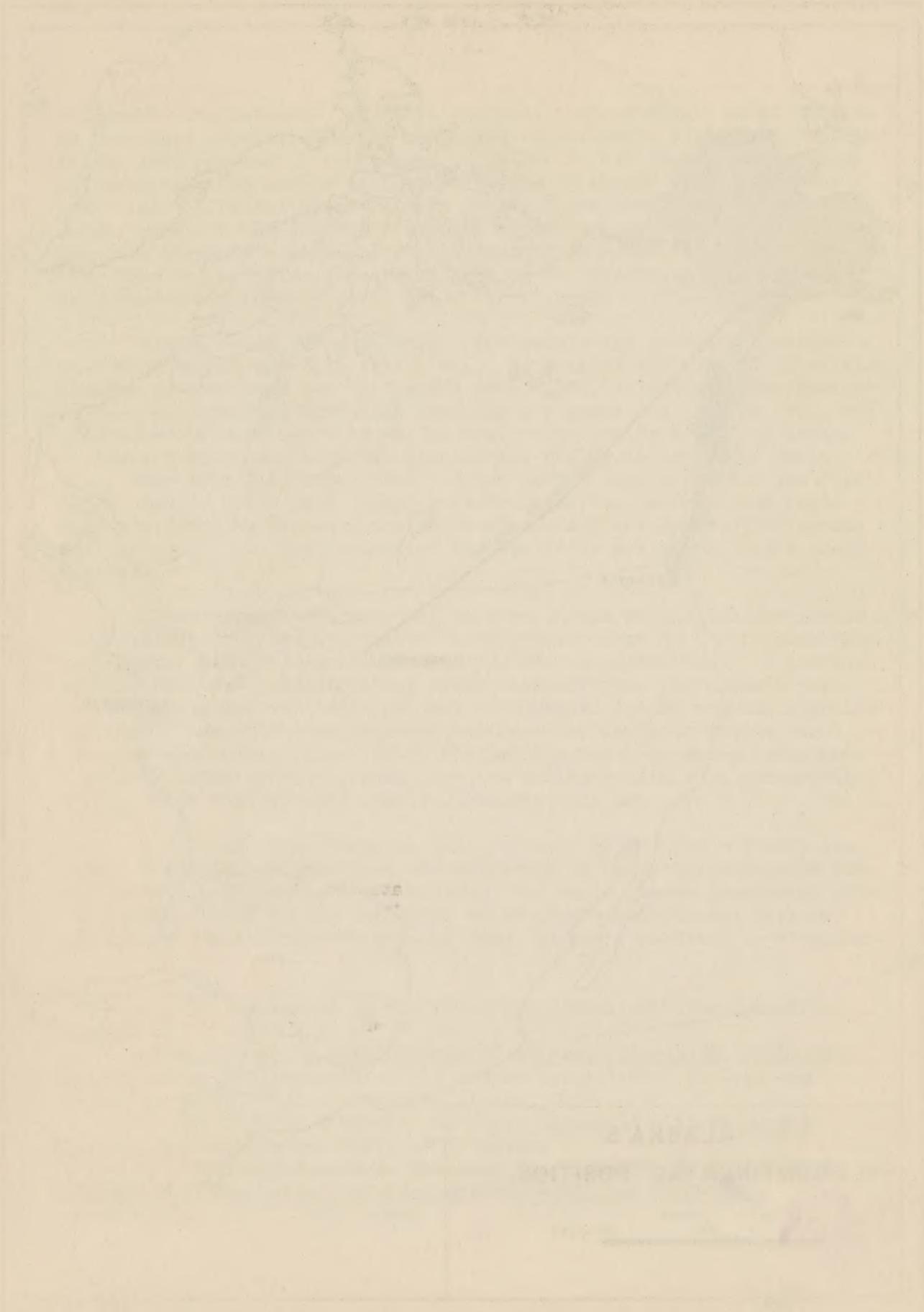


Figure 1



ALBANY
POSITION
1850

importance strategically, yet its population is only about 100,000. A larger population is desired to help supply the Territory's military bases and to fill the unpopulated gaps between them.

Assuming that Alaska does need people, then we must plan deliberately for the new settlement. However, planning cannot be done without, first, the careful and complete collection and analysis of all pertinent facts. Past and present experiences during the settlement of Alaska and of similar areas throughout the world should be analyzed. As Bowman wrote, in an article worthy of any planner's attention, "The moment we recognize the common features of marginal settlement we see how haphazard has been the pioneering of the past and how unsystematic and incomplete our knowledge of it. The thrust of culture into vacant lands has been almost without guidance because the facts have not been known. The venturing farmer has had to be his own scientist." ^{2/} It was so in the Matanuska Valley and lack of facts need not be present again unless rapidity of settlement is insisted upon. Also, the history of administration of Alaska by both Russia and the United States is a story of neglect. Adequate planning could lead to the correction of some of the evils of the neglect as well as to sound progress.

What should a group of new settlers do for a living? Probably mixed farming. In Alaska and in the Canadian Peace River country mixed farming has proved to be one way of insuring the permanence of new settlements. By mixed, or general, farming new settlers could produce all or part of their food and thereby reduce complete dependence upon lines of transportation. However, farming has been and still is difficult in the Territory. Physical conditions there often make farming discouraging, particularly when aggravated by the ever-present problems of cost and availability of transportation between points of supply, the markets for any surpluses, and the farm. Thus, the choice of an area for Alaskan group farming must be made with great care.

Where can a group of new settlers farm in Alaska? This question should remain unanswered until sufficient data are available. Irwin has listed ten areas in the Territory as suitable for farming. ^{3/} Possibly three of those areas could not be recommended for group settlement on the basis of present information. The remaining seven areas

^{2/} I. Bowman, Planning in Pioneer Settlement, Annals of the Association of American Geographers, V. XXII, 1932, pp. 93-107; reference on p. 96.

^{3/} D. L. Irwin, Recommendations for Agricultural Development in Alaska, in U.S. Department of Agriculture, Report on Exploratory Investigations of Agricultural Problems of Alaska, Washington, D.C., 1947, pp. 54-58 and W. A. Rockie, What of Alaska?, Soil Conservation, January, 1946, pp. 147-153 and 160.

physically suitable for group settlement are: Near Kenai village, at Dunbar, at Big Delta, in the Big Susitna River valley, in the Kuskokwim River valley, in the Copper River Basin, and on Kodiak Island (Fig. 2). The two areas that have been reserved for proposed settlement and where preliminary studies were started in 1948 are near Kenai village, about 65 miles southwest of Anchorage, and at Dunbar, about 35 miles directly southwest of Fairbanks. The Kuskokwim Valley might be eliminated because it is isolated and the Dunbar area may be dropped because of the possibilities of the land becoming pitted when cleared and of insufficient water for domestic supplies. However, even with these two omissions there still are four areas to consider after that near Kenai has been investigated. Sufficient data on the areas are lacking. One essential early planning step is to consider all recommendable areas. Another basic step should be the analysis of settlement methods used in similar areas in the world. The experiences of group settlement in such places as western Canada, Iceland, northern Europe, northern U.S.S.R., Australia, and southern South America should be added to the facts about at least the seven Alaskan areas noted before action takes place. There is no great hurry about Alaskan settlement; United States farmers are not desperate for land, prices are high, and the number of employed in the United States is now the largest in our history. Qualified personnel should be made available to carry out the above two steps in planning if the Federal government is to underwrite proposed settlement.

Why should proposed settlement be by groups rather than by individuals? Group settlement affords a general strength to a community through greater numbers of people present, a particularly significant point in frontier areas. Also, group settlement offers the possibilities of cooperative action to reduce costs of living and to increase profits from farming, as well as the opportunity for division of labor. Cooperative settlements in Iceland and Scandinavia, to name only two areas, have progressed rapidly in recent years and have showed to a degree what might be done in Alaska. Also, the question might be answered negatively by repeating that the Territory is too thinly populated as a result of settlement on an individual basis. All the growth has been from settlement by individuals with the exceptions of the Matanuska Valley Colony and the Metlakatlan Indian settlement in Southeastern Alaska, near Ketchikan. For the purpose of populating Alaska the Matanuska Valley Colony must be called an outstanding success because the community based on permanent agriculture is still growing and is the largest of its kind in the Territory. Much of the success stems from the Colony's formation as a group settlement though some of the success resulted from strong Federal backing and relatively favorable physical conditions.

The questions above are not the only ones that might be asked about proposed group settlement in Alaska. Those noted are the questions

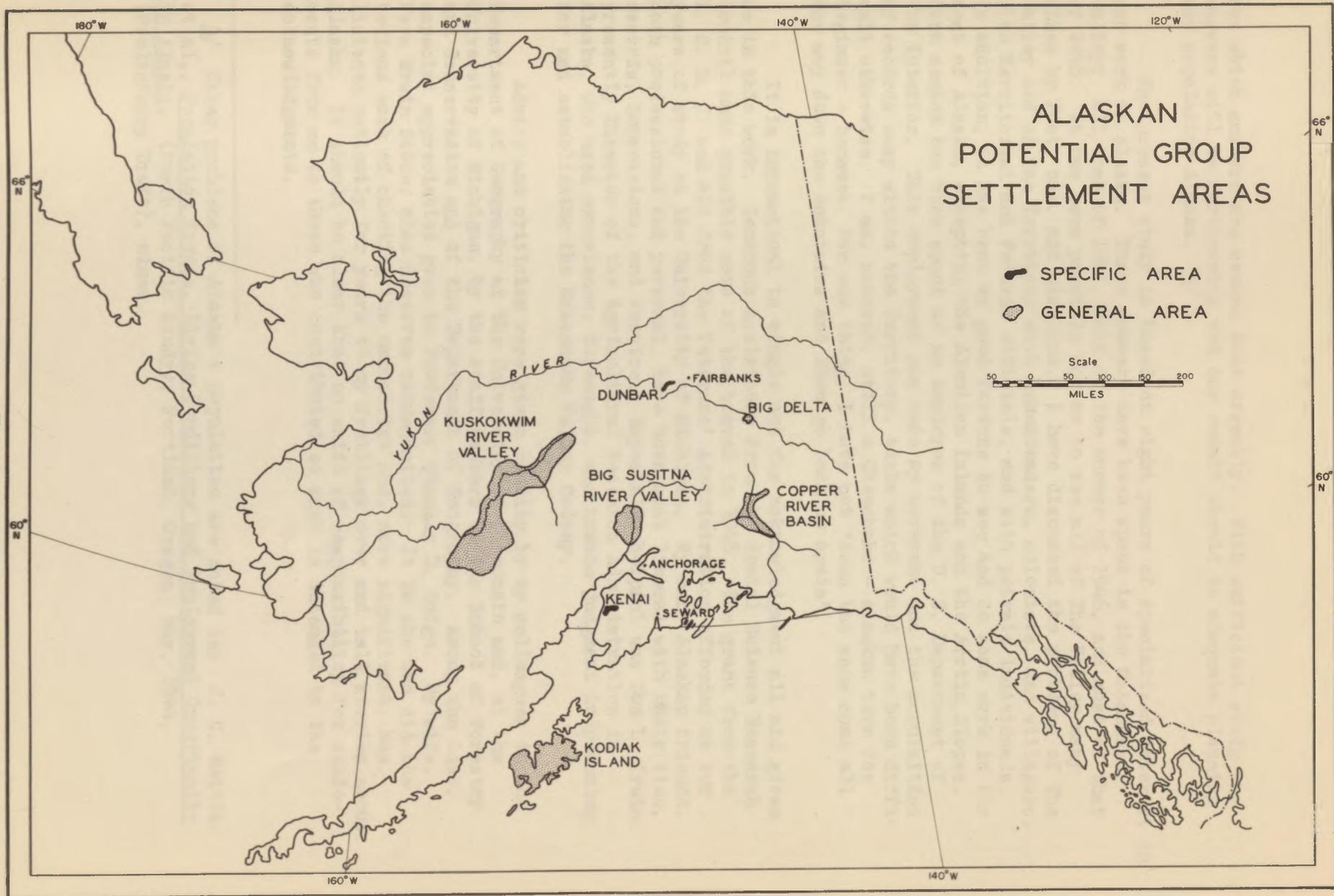
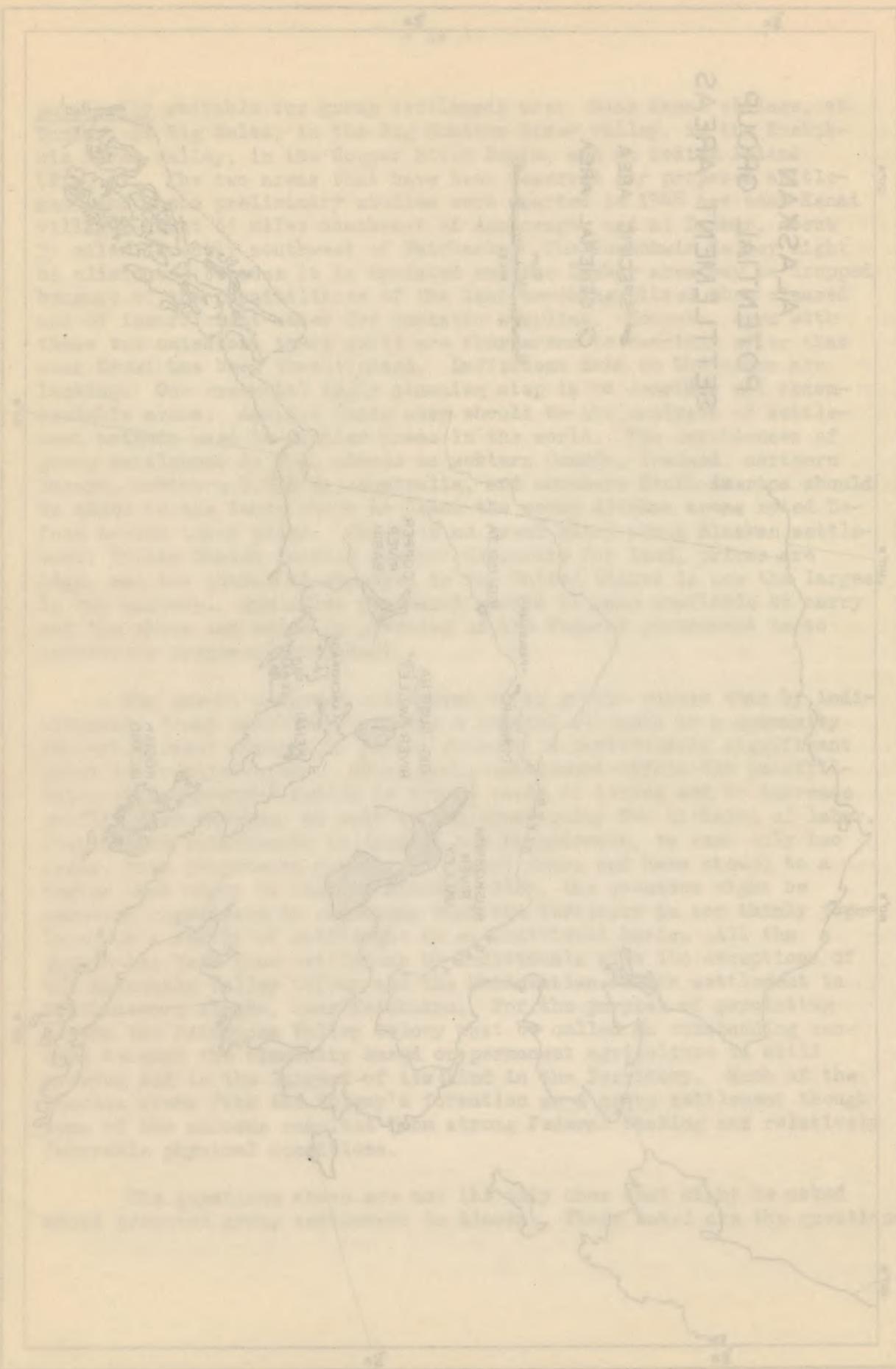


Figure 2



The purpose of this map is to show the geographical features of the Soviet Union. It includes major cities, rivers, and administrative boundaries. The map is oriented with North at the top. Major cities labeled include Moscow, Leningrad, and others. Rivers like the Volga and Dnieper are shown. The map is framed by a double-line border.

СЕЛТГЕМЕИТ МЫЕВЫЗ
 БОЛЕИЛИТ ОНОЛТ
 АГАСКАИ

for which answers are needed most urgently. With sufficient study the answers will be forthcoming and one result should be adequate planning for populating Alaska. 4/

The present study is based on eight years of specialized interest in and work on Alaska. Three summers have been spent in the Matanuska Valley: all that of 1941, half of the summer of 1946, and most of that of 1948. It has been possible for me to see all of The Valley many times by foot, car, and airplane. I have discussed the problems of The Valley and of the Territory with homesteaders, colonists, and villagers, with Territorial and Federal officials, and with private individuals. In addition, it has been my good fortune to see and do some work in the rest of Alaska, excepting the Aleutian Islands and the Arctic Slopes. Each season has been spent as an employee of the U. S. Department of the Interior. This employment has made my movement and the acquisition of records easy within the Territory, tasks which would have been difficult otherwise. I am, however, still a Cheechako - Alaskan term for beginner - because, for one thing, I have not "seen the snow come all the way down the mountains and then go back up again".

It is impractical to single out for acknowledgment all aid given me in this work. Generous assistance from the Social Science Research Council made possible some of the travel in 1948. The grant from the S. S. R. C. and aid from the Veterans' Administration afforded me two years of study at the University of Michigan. My many Alaskan friends, both professional and personal, have been most liberal with their time, records, impressions, and service. Especially helpful was Don L. Irwin, presently Director of the Agricultural Research Administration in Alaska, who used experience, foresight, and humane judgment in planning for and establishing the Matanuska Valley Colony.

Advice and criticism were given readily by my colleagues in the Department of Geography at the University of Wisconsin and, at the University of Michigan, by the staff members of the School of Forestry and Conservation and of the Department of Geography. Among the last, especial appreciation goes to Professor Stanley D. Dodge. My wife, Vera Erwin Stone, also deserves commendation. It is she who did the tedious work of checking the manuscript and, more significant, has listened patiently for years to my frettings over and tall stories about Alaska. It should be clear that no shift of responsibility for statements from me to those who contributed so much is intended by the acknowledgments.

4/ Other problems of Alaska's population are noted in: J. C. Rettie, et al., Population Trends, Living Conditions and Employment Opportunity in Alaska, (North Pacific Study), Portland, Oregon, May, 1944, (Preliminary Draft), mimeo.

Certain parts of the analysis of the economics of Alaska and of the Matanuska Valley have been omitted. The omission is deliberate and in favor of the more detailed coverage of the topic in a report by the Department of Agriculture.

Readers should understand that my viewpoint is one of impartial judgment and not of personal criticism. I have recognized throughout the study that criticism in retrospect is very easy and that the Matanuska Valley Colony is the favorite butt of caustic comments, some founded on facts and others not. My attempt here is to present the facts about the Colony as I have found them to be or as they could be interpreted fairly. By recognition of some of these facts, and by avoiding the errors in the colonization of the Matanuska Valley, we should be able to make better plans for settlement elsewhere in Alaska and thus insure their permanence.

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University of Wisconsin
January 1949

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THE METACON VALLEY IN ALASKA

The work covered the country described well the Metacoon Valley. Maps of the area's physical features show about 450 square miles of open valley. Open forest land may be added where woods are thickly settled and it is seen that the productivity of the area may be noted. The forest cover began in 1911 with the establishment of the Metacoon Valley Colony. Plans for the Colony were made in Washington and the colonists were the disadvantaged people from Michigan, Minnesota, and Wisconsin. Up to 1930 the Metacoon Valley, referred to as the Valley, had been similar to many valleys in the Northwest, each confined largely by the narrow limits of a few miles to exploit the animals and minerals. Through the efforts of a federal government-sponsored group settlement and by individuals, the Valley has become well together here already and was the first of the Valley testing ground for the development of such a valley and the northern edge of the timbered forest zone. The valley has become a permanent and growing settlement and the experiences are to draw plans for other valleys in Alaska.

Part I

INTRODUCTION

The Great Alaskan Valley is a valley which is, from the south-west. The first settlement was in the year 1911 by about five people. They walked northward from the south Alaska and then northward another 200 miles to the end of Cook Inlet (Fig. 1). In this part, 200 miles of the valley of settlement, some people tried to walk north and west farther northward on Cook Inlet. They moved on the north-central shore of the valley, again settling a roughly rectangular area. In the northern part of the valley are the timbered mountains, on the eastern side a part of the forest mountains, on the west side 150, and on the east an extensive valley where the Valley opens with the inland of the Alaskan Coast (Fig. 2). In the upper part the valley is about 15 miles wide and, in other words, at the southern western boundary, the valley is about 15 miles wide.

Within Alaska the regional position of the Metacoon Valley has been favorable for increased permanent settlement. The valley area is well kept in almost production of not only agricultural products, and mineral products, but the region's future with respect to agricultural and mineral growth is promising. The Valley is being to grow because it

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Chapter 1

THE MATANUSKA VALLEY AS A WHOLE

The words diverse and dynamic describe well the Matanuska Valley. Maps of the area's physical features show about 450 square miles of great variety. Upon these maps may be placed others showing the history of settlement and it is then that the rapidity of changes in the area may be noted. The fastest change began in 1935 with the establishment of the Matanuska Valley Colony. Plans for The Colony were made in Washington and the colonists were 903 disadvantaged people from Michigan, Minnesota, and Wisconsin. Up to 1935 the Matanuska Valley, referred to as The Valley, had been similar to many valleys in Southern Alaska, each unified loosely by the common desire of a few people to exploit the animals and minerals. Through the placing of a planned, government-sponsored, group settlement upon that which had been unplanned and by individuals, the Matanuska Valley became knit together more closely and was the first United States testing ground for the resettlement of white people near the northern edge of the inhabited Western world. The colony has become a permanent and growing community and from its experiences may be drawn guides for planning settlement elsewhere in Alaska.

The usual approach to The Valley was, and still is, from the southwest. The first American settlers in the area went to it by boat from Seattle. They sailed northwestward 1500 miles to Southern Alaska and thence northeastward another 200 miles to the head of Cook Inlet (Fig. 3). At this point, just north of the site of Anchorage, these people transferred to small boats and went farther northeastward on Knik Arm. They landed on the north-central shore of the Arm and began settling a roughly rectangular area. On the northern side of The Valley are the Talkeetna Mountains, on the eastern side a spur of the Chugach Mountains, on the south Knik Arm, and on the west an arbitrary boundary where The Valley merges with the lowland of the Big Susitna River (Fig. 4). At the eastern side The Valley is about 13 miles wide but 30 miles westward, at the indistinct western boundary, its width is about 18 miles.

Within Alaska the regional position of the Matanuska Valley has been favorable for increased permanent settlement. The Cook Inlet region ranks high in Alaskan production of sea foods, agricultural produce, and industrial goods; the region's future with respect to agricultural and industrial growth is promising. The Valley is easy to reach because it

is on the south side of Alaska and is connected by sea with the United States. In addition, the area is crossed by the Alaska Railroad and part of the Territorial highway system, and it has three landing strips for airplanes. For markets, The Valley is within 50 miles by road or railroad of Anchorage, largest Alaskan city (15,000--20,000 inhabitants), or produce may be marketed in the Alaska Railroad Belt, one of the more heavily populated parts of the Territory. Also, The Valley's location with respect to government is favorable. Anchorage is the administrative center of the Third Judicial District of Alaska and most of the Federal agencies operating in Alaska have offices in the city. The facilities for communication between Anchorage and The Valley by road, railroad, telephone, and radio partly counterbalance the 575-mile separation of the Matanuska Valley from Juneau, Territorial capital.

A title which fits more closely The Valley's surface is "The Knik Arm Lowland". Actually, the area is part of a large plain which borders the upper edges of Cook Inlet. Only a part of the lower Matanuska River is in The Valley and then just on the eastern side. About 90 percent of the land is between 100 and 500 feet above sea level. Old flat river benches line the southeastern and southern sides of the area and in the western part are low ridges extending east-west or northeast-southwest. However, most of the surface is broken by irregularly shaped ridges and depressions which are arranged in a disorderly pattern. Excepting the outcrops of bed rock in the southeastern corner of The Valley, all of the surface features are products of mountain glaciation in recent geologic time.

The soils are mixtures of silt, sand, and gravel with silt loams and sandy loams predominant. All of the materials were deposited under ice and some have been redeposited by water or wind. In general, gravel underlies all the soils in The Valley. In the eastern part silts and sands are as much as 10 feet deep while in the western part of the area gravel is at the surface or within a few inches of it. Most of the soils are slightly sour and the mineral soils have a low organic content. Permafrost, or permanently frozen soil, has been found only where drainage is inadequate and a dense plant cover is present.

Most of The Valley is forested although great variations in plant life also occur. The forest, part of the world's boreal forest, is composed of a few simple associations or relatively pure stands of coniferous or broadleaved trees. Usually white spruce trees, white and yellow birch, aspen, and tall grasses grow on relatively warm, moist, sandy soils that are in better drained parts of the area; cottonwood trees and willows are in cool moist sites along stream beds; and black spruce trees, cranberry bushes, sedges, and sphagnum moss grow in the poorly drained parts. These plant associations are broken irregularly and reflect the mixed distribution of soils and of adequate and inadequate drainage throughout The Valley.

In general, the area's drainage system is poorly developed and empties southwestward into Knik Arm (Fig. 4). Three streams carry

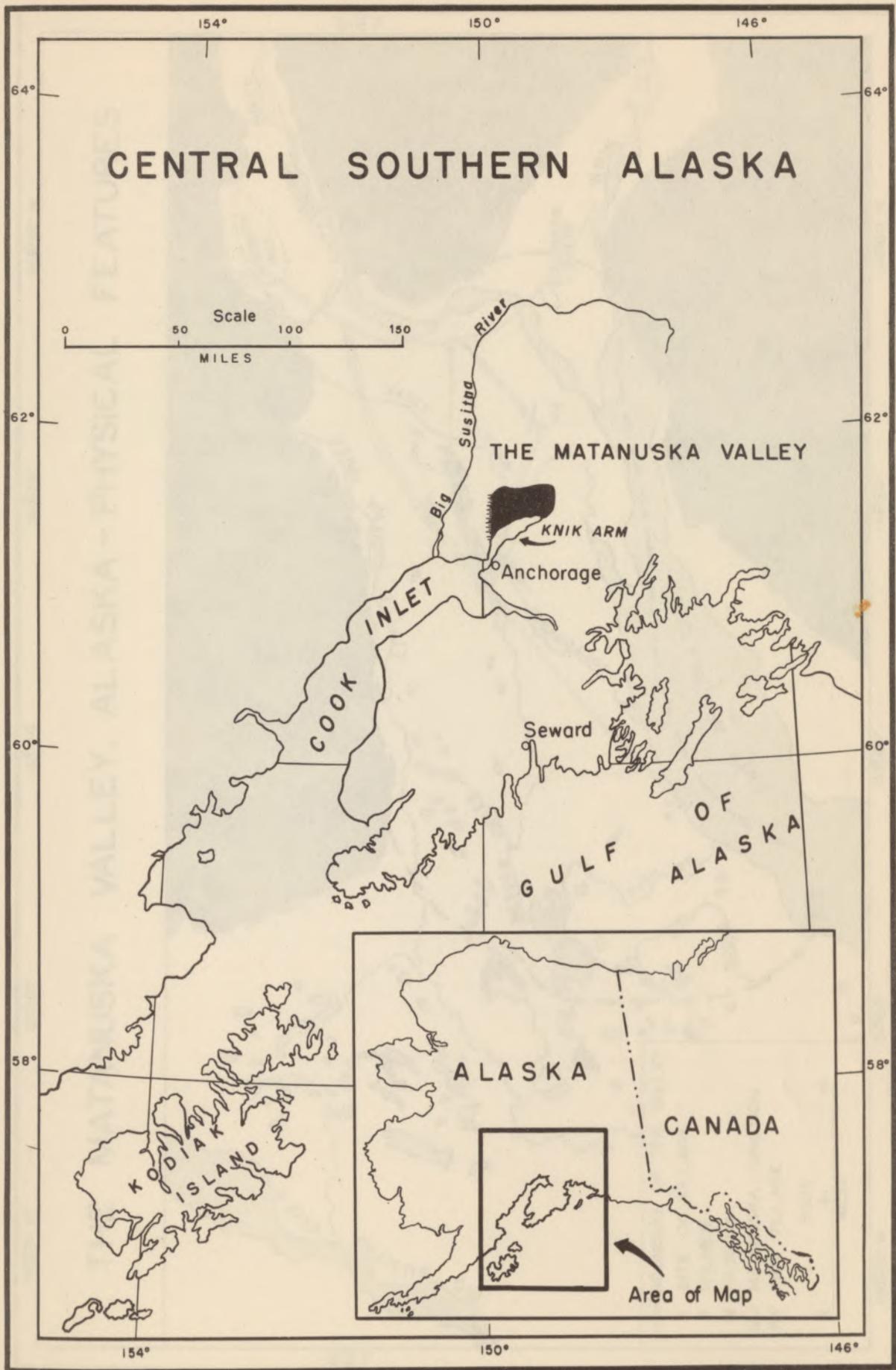


Figure 3

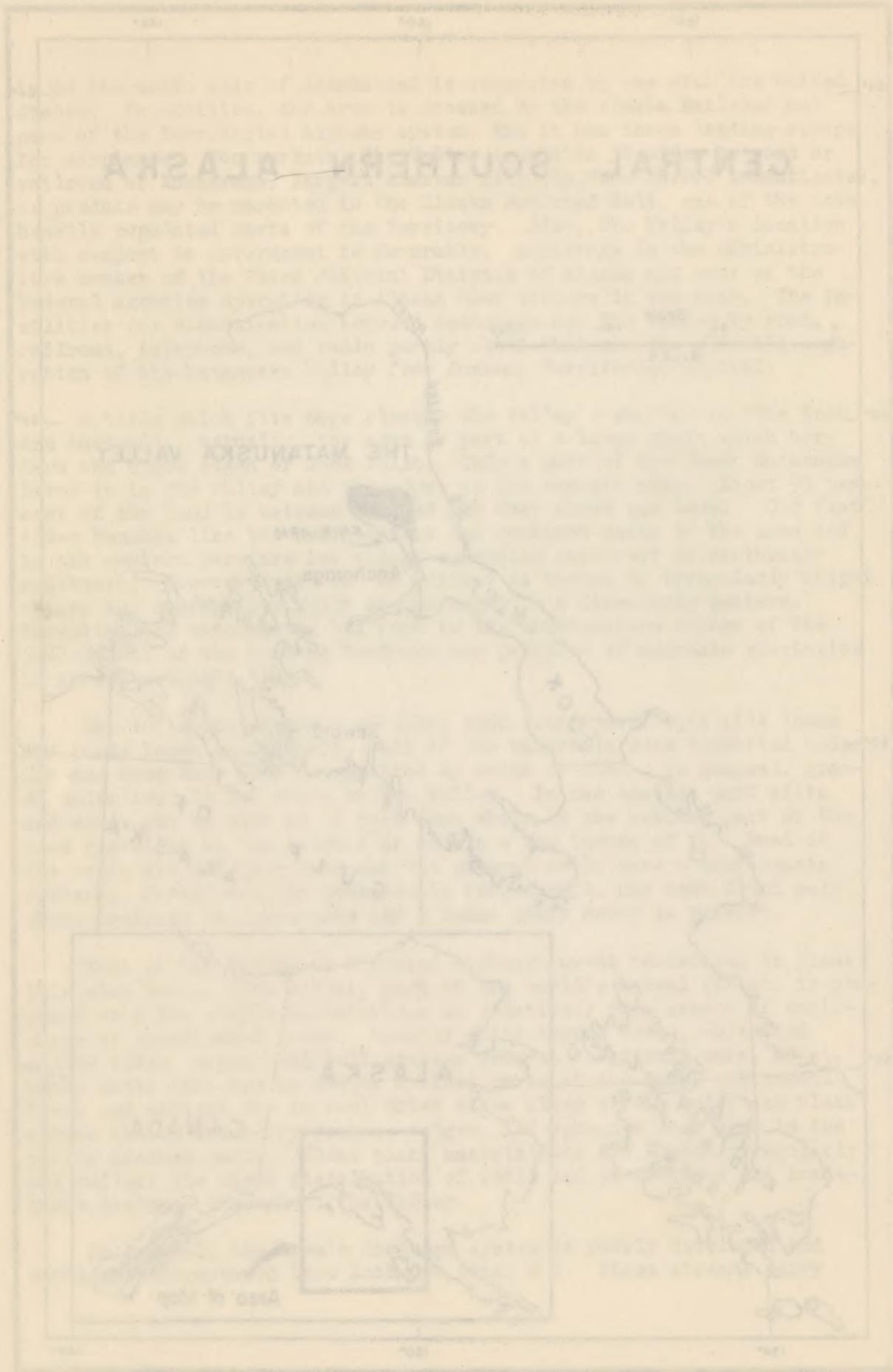


Figure 3

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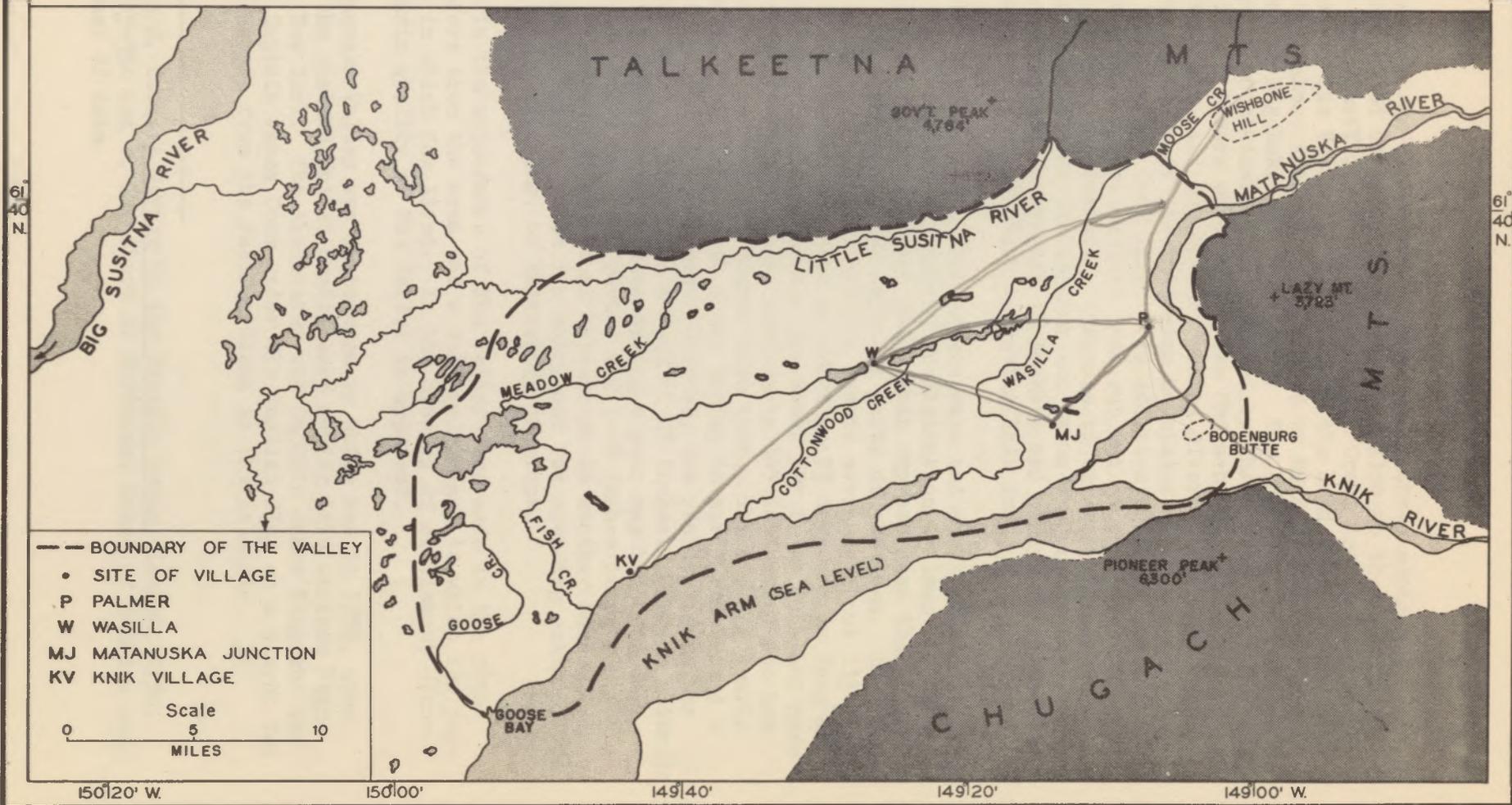
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THE MATANUSKA VALLEY, ALASKA - PHYSICAL FEATURES

Figure 4



--- BOUNDARY OF THE VALLEY

- SITE OF VILLAGE
- P PALMER
- W WASILLA
- MJ MATANUSKA JUNCTION
- KV KNIK VILLAGE

Scale
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150°20' W.

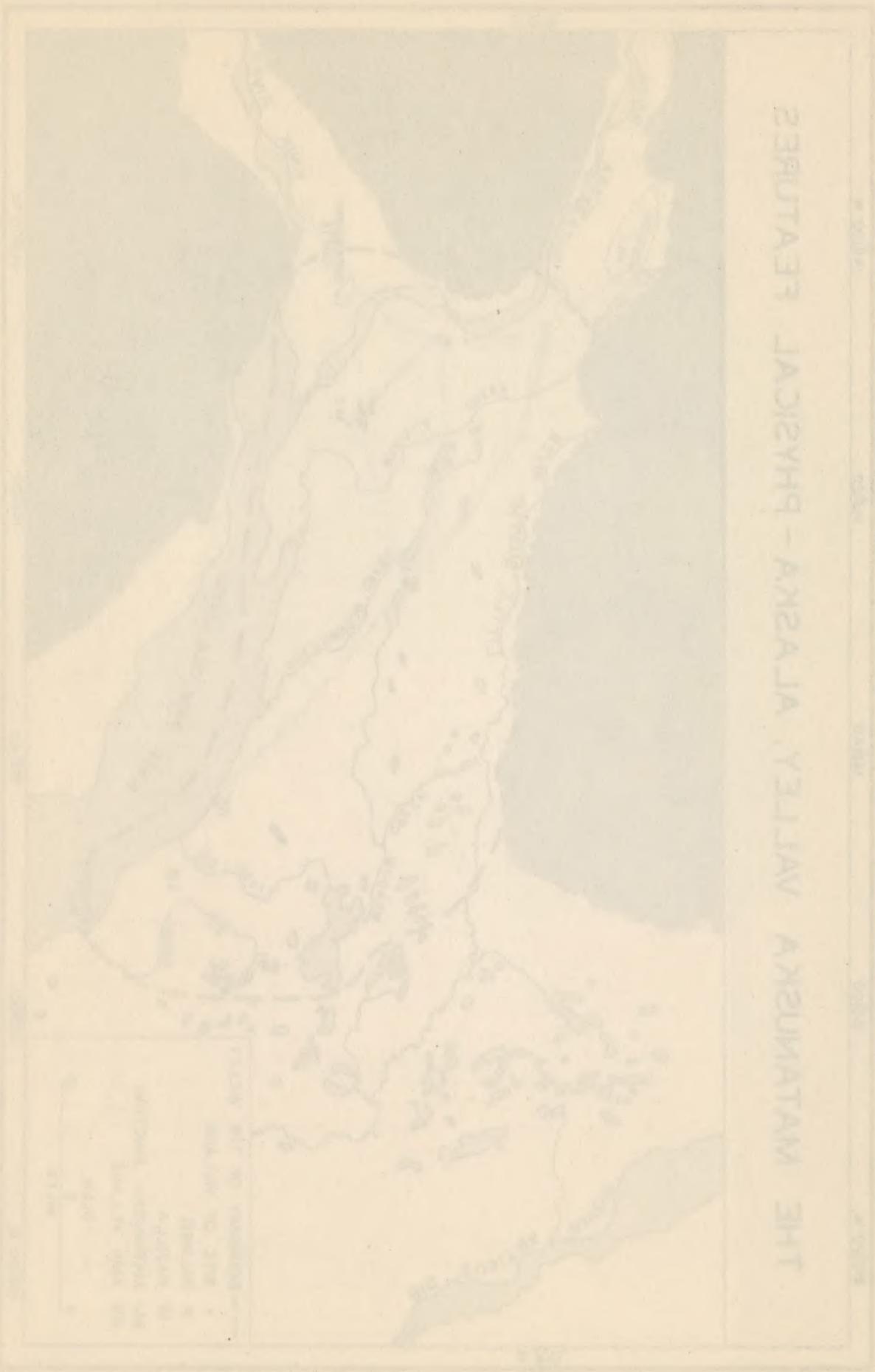
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149°40'

149°20'

149°00' W.

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most of the water. In the center of The Valley three elongated lakes drain into Cottonwood Creek which flows nine miles to the Arm. East of the lakes the runoff is carried by Wasilla Creek from the north-eastern corner of The Valley to a slough at the head of Knik Arm. To the west of the lakes, drainage is westward by Meadow Creek and thence southward through Big Lake and Fish Creek. The edges of The Valley and the adjacent mountainsides are drained by three other streams: the Matanuska and Knik Rivers which drain the Chugach Mountain slopes into the head of Knik Arm, and the Little Susitna River which flows slowly westward along the base of the Talkeetna Mountains' slopes and then southward to the head of Cook Inlet. In addition to these streams are many lakes into which short gullies lead but out of which water moves by percolation under the surface. Adequate to excessive drainage occurs on higher land near the streams and lakes and where soils are sandy but poor drainage is present in pockets and strips throughout The Valley and on the tidal flats bordering Knik Arm.

Generally, summers in The Valley are warm and short, winters moderately cold and long, and the yearly precipitation is low. Fluctuations from year to year are great and within any one year there usually are striking differences between adjacent parts of the area. The Matanuskan season which is free of killing frosts averages about 115 days but since 1917 the season has been as short as 73 days and as long as 165 days. Mean maximum temperatures are about 57° F. in July and have varied less than 2° while the mean minimum is 14° in January and has been at least 6° lower and 12° higher than that. The average yearly precipitation is 15.5 inches with a dry period in early summer and a wet period at the end of the summer; however, the yearly figure has varied from a low of 11 inches to a high of 27 inches. Between climatic stations in The Valley, differences during a year may be 40-60 days in the length of the frost-free period and 2--8 inches in yearly precipitation. These annual and local variations in weather have given many a Matanuskan settler cause for worry and for spending extra effort on the planting, replanting, or harvesting of crops.

Changes in the appearance of The Valley were made in the 20th century. Before then the area was a cultural island to which few people came and in which few lived. In the history of settlement since 1900 the dynamic quality of The Valley is apparent.

The Matanuska Valley was discovered by white men in 1778, when settlers in the eastern United States were moving into western Pennsylvania and New York. The discoverer was Captain James King who was sailing with Captain James Cook under the English flag on a search for a northeast passage from the Pacific Ocean to the Atlantic. ^{1/}

^{1/} Captain J. Cook, A Voyage to the Pacific Ocean, London, 1784, v. II, pp. 393-394 and v. IV, Chart of Northwest Coast of America and Northeast Coast of Asia.

Captain King's report to Cook was the basis for European geographers theorizing for 16 years that a northeast passage began at Knik Arm. The theory was proved incorrect in 1794 when Captain George Vancouver made the first accurate map of the Arm in English. ^{2/} However, the fact that The Valley was ignored by other explorers and by the great Russian trading companies is indicated by the failure to show correctly on maps before 1900 the two rivers that enter the area at its eastern corners.

Russians did not settle in The Valley. Their disregarding it was for four reasons: 1) an intense rivalry between competing fur companies in the Cook Inlet region, 2) the remoteness of The Valley in relation to Russian centers of settlement on Kodiak and Baranof Islands, 3) Southeastern Alaska's higher potential than The Valley's in the skins of sea otter, fur seal, beaver, and fox, and 4) the Russian--English (Russian American Fur Company--Hudson's Bay Company) conflict over trading interests in Southeastern Alaska. ^{3/} In 1835 the Russians established a mission at Knik village, in the southwestern part of The Valley. The mission is the only recorded Russian establishment in the area but it was moved eastward across Knik Arm to Eklutna village in the early 1900's or perhaps earlier. ^{4/}

Probably few more than 100 Indians lived in The Valley at any one time. They were hunters, fishermen, and trappers. Black bear was killed for the meat, salmon and trout were taken from the streams and lakes for food, and trapping was for the pelts of beavers and land otters. Woodland caribou, moose, and mountain sheep were killed for the skins. The Indians had limited contacts with natives beyond The Valley, with Russians, and with early American trappers. Indian travel was by boat in summer, or across-country in winter when the swamps were frozen, and few trails were established that could be used by the white settlers who occupied the area later. In 1880, when the first Alaskan census was made, there were two Indian settlements in The Valley and both were near Knik Arm. ^{5/} The settlement of Knakatnuk, at the site of Knik village, had 57 people at the time of the census and the

^{2/} Captain G. Vancouver, A Voyage of Discovery to the North Pacific Ocean, and Round the World, London, 1801, v. V, p. 211.

^{3/} H. H. Bancroft, The Works of Hubert Howe Bancroft, History of Alaska, 1730-1885, San Francisco, 1886, v. XXXIII, passim.

^{4/} Data about the establishment and movement of the mission were obtained from official reports on General Land Office Survey No. 239 and Patents No. 419309 and 423817.

^{5/} U.S. Dept. of the Interior, Census Office, Tenth Census of the United States, 1880, Washington, D. C., 1884, v. 8, p. 29 and Plate 2.

settlement of Kinik, near the location of Matanuska Junction, had 46 Indians in it. At Knakatnuk there was one white trader in 1880. However, he was one of a few private traders who went to The Valley and known organized trading by American companies fell short of the area like that of the Russians. By the end of the 19th century the Indians, and the Russian and early American traders as well, had not changed The Valley's appearance as a wilderness. The occupations of hunting, fishing, and trapping continued but they became secondary to the mining of gold and coal and later to farming.

In 1898 The Valley was abruptly disturbed. Placer gold had been discovered in the Talkeetna Mountains the year before. American miners went to and through The Valley in a small gold rush. Knik Village was the focus of settlement (Fig. 5A). Bigger rushes were taking place in the Klondike region of northwestern Canada and in Interior and Western Alaska but in 1906 lode gold was located in the Talkeetnas and The Valley's disturbance continued. In the next ten years settlement proceeded gradually and commercial deposits of coal were found off the northeastern corner of the area. During these years Knik Village was a thriving center of supply and transportation (Figs. 6 and 7). Then, in 1916, the Alaska Railroad was built through The Valley and changes took place.

Nearby Anchorage became a village almost over night. This growth was at a site where there had been no settlement and the new village was to be the place of shipment for Matanuskan coal and a division point on the railroad. In The Valley two villages were founded. Matanuska Village grew up where the railroad's branch line to the coal mines met the main line and then went southward over Knik Arm (Fig. 8). Where the main line crossed a trail from Knik Village to the gold mines was founded Wasilla (Fig. 9) and it became The Valley's focal point (Fig. 5B).

With the construction of the railroad homesteading farmers settled near it. Also, after 1929 colonization efforts by the Alaska Railroad attracted more settlers to The Valley.^{6/} By 1935 most of the better farming land in the area was privately owned by homesteaders; an open network of roads was present but only the railroad connected The Valley with Anchorage.

In the 37 years between 1898 and 1935 The Valley acquired a new look, that of a spottily broken wilderness (Fig. 10). The settlement appeared to be unplanned and thin but permanent. In 1934, 117 families of settlers were tied to the railroad and to the open network of 124 miles

^{6/} The extent of settlement and the nature of the three periods of growth were determined by the mapping and analysis of dates of application to acquire titles to parcels of land and by observation and questioning in The Valley. The dates of application are recorded in the tract books at the District Land Office of the Bureau of Land Management in Anchorage, Alaska.

of road. About 1000 acres of land were cleared and cropped. The framework for planned agricultural settlement after 1935 was this pattern of unplanned settlement that originated with the mining of gold and coal at the start of the 20th century.

The planned settlement of the Matanuska Valley began in 1935 with the arrival of the farmer-colonists. They settled in the eastern part of the area, mostly on previously homesteaded land adjacent to the western side of the Matanuska River. Since the arrival of the colonists trees have been cut and burned, more and more land has been cultivated, and roads and farm buildings have been built. The center of settlement shifted eastward from Wasilla to the new village of Palmer (Fig. 5, C and D). By 1939 Palmer had a population of 244, Wasilla had grown slowly to 96, and Matanuska Junction had declined to 62 and Knik village to 40. At the present time the last two villages have less than 10 people each. Changes are still being made at a rapid rate, in fact so rapidly that The Valley's settlers are likely to answer the question "What is coming?" by stating "Just wait a minute and see!"

The forests and the flatness of The Valley prevent a view of it as a whole from the ground. However, the areal unity, the local contrasts, and the present product of successive settlement are readily apparent from an airplane flying over the eastern part of The Valley in summer. ^{7/} The rugged Talkeetna and Chugach Mountains appear to sharply enclose the area on the north and east. To the south is the drowned river mouth, Knik Arm, to the south of which are the main ranges of the Chugach Mountains. Westward The Valley merges with the plain of the Big Susitna River. From the airplane the local irregularities of the area's surface appear to be emphasized by clearings that look like angularly shaped "holes" in the spruce-birch forest. Green clearings are dotted with cattle or are broken into strips by black rows of stumps or differently colored crops of hay, grain, and vegetables. On early summer days dust storms originating on the Knik River floodplain to the southeast, may obscure the view while in late summer small rain clouds may be seen originating in various directions from the plane and passing over narrow parts of The Valley. In late July or early August the Knik dust storms are lessened temporarily because the river is then in flood, the result of the natural dumping of glacial Lake George in the Chugach Mountains.

From Anchorage, to the southwest, a single line of tracks marks the railroad's winding route along the southern shore of Knik Arm and across the head of the Arm to Matanuska Junction. At the junction the railroad splits and while the main line goes westward through Wasilla towards Fairbanks, a branch line goes northeastward through Palmer to Wishbone Hill where coal is mined.

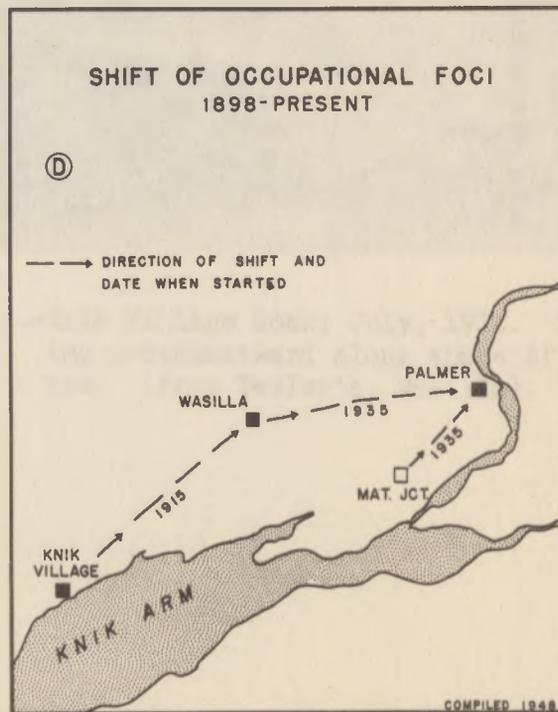
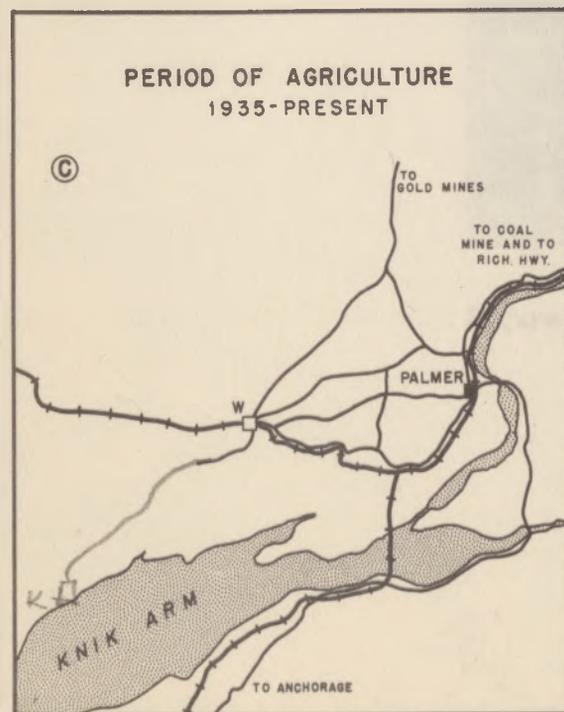
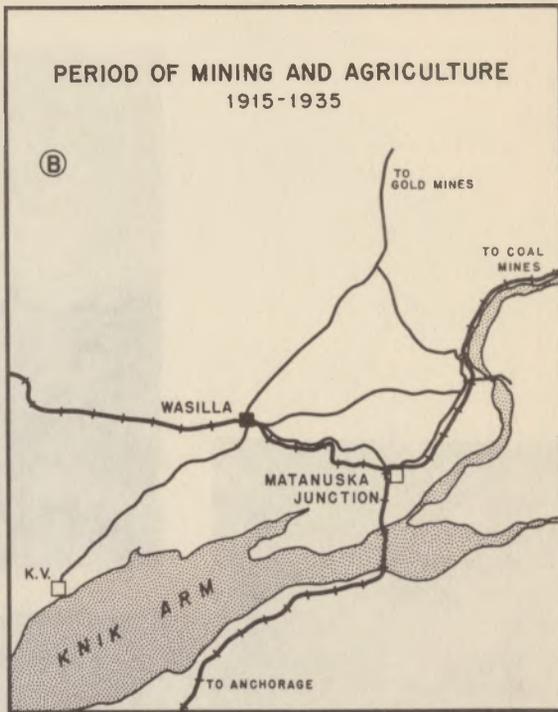
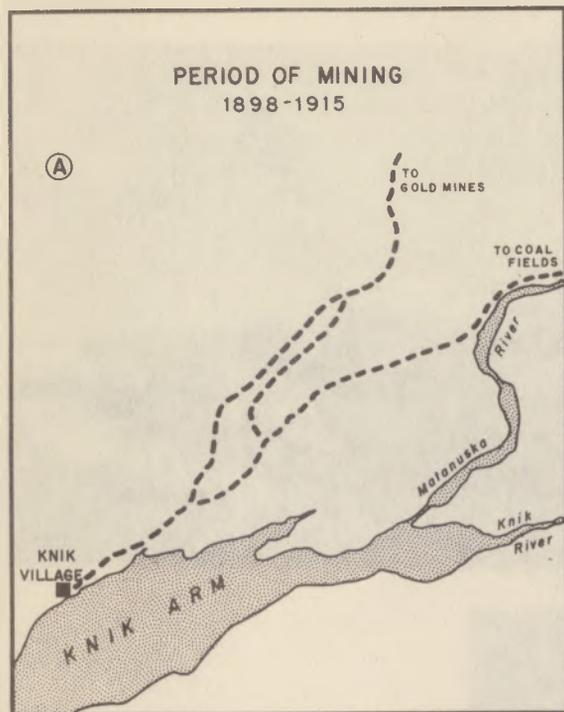
^{7/} W. A. Rockie, A Picture of Matanuska, Geographical Review, v. XXXII, 1942, pp. 360-371.

MATANUSKA VALLEY, ALASKA

OCCUPATIONAL FOCI

- PRIMARY FOCUS
- SECONDARY FOCUS

- MAIN TRAIL
- MAIN ROAD
- RAILROAD



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Figure 5

MATANUSKA VALLEY, ALASKA

MATANUSKA VALLEY, ALASKA. The Matanuska River, which flows northward from the Matanuska Mountains, is the largest river in the Matanuska Valley. It is a typical braided river, and its course is constantly changing. The Matanuska River is a typical braided river, and its course is constantly changing. The Matanuska River is a typical braided river, and its course is constantly changing.

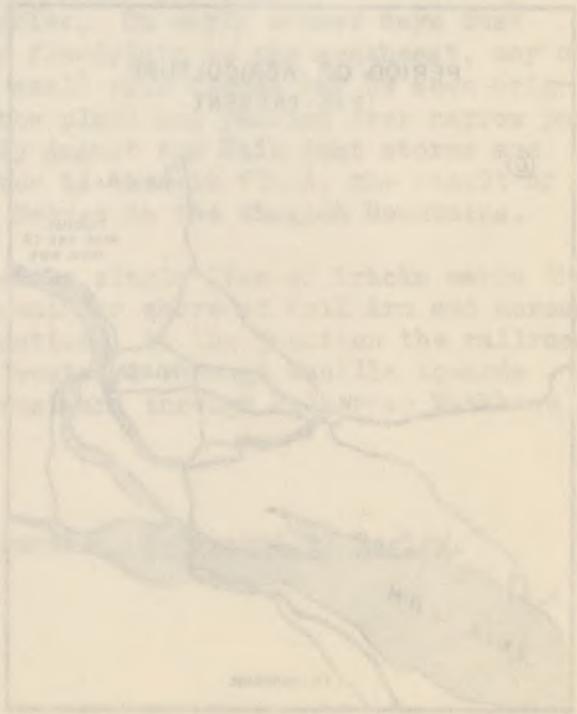
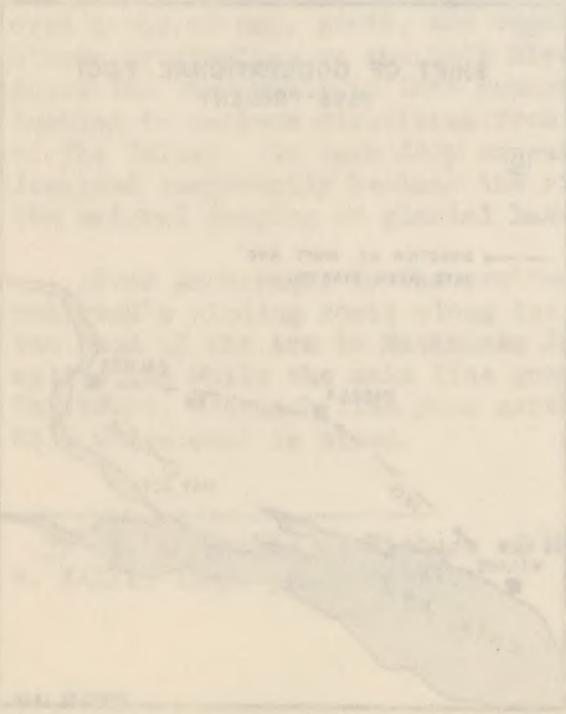
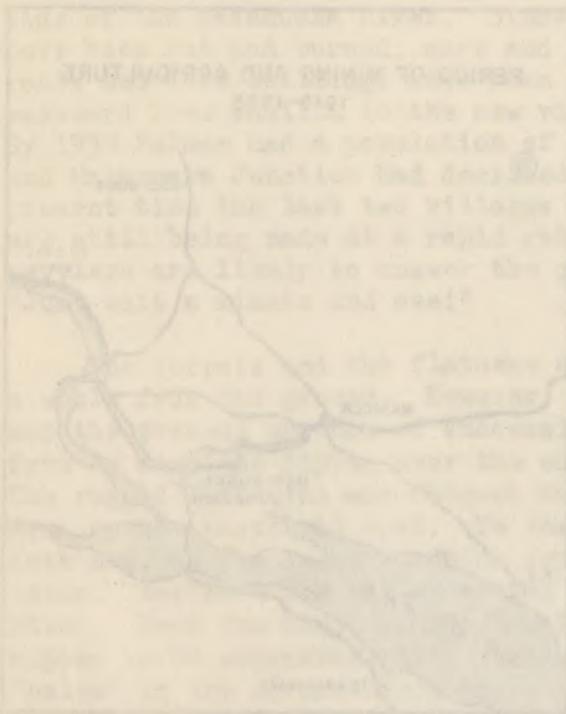


Figure 6.-Knik Village; July, 1914. Looking northeastward from center of village. (From Teeler's, Wasilla).

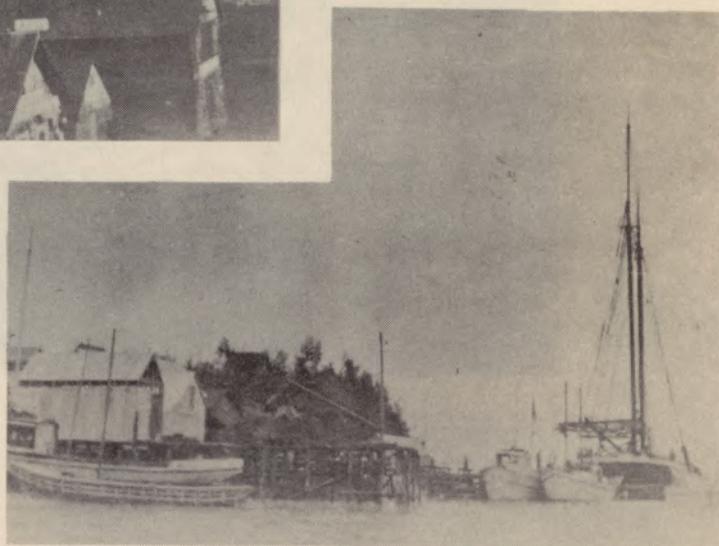
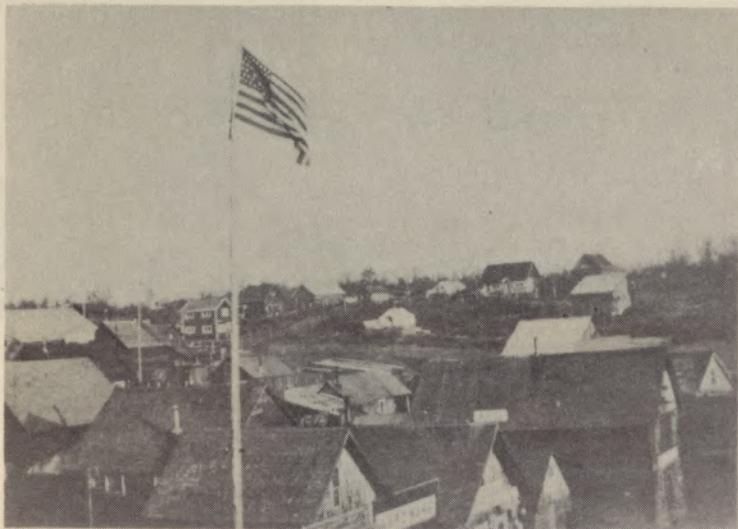


Figure 7.-Knik Village Dock; July, 1914. Looking northeastward along shore of Knik Arm. (From Teeler's, Wasilla).

Figure 5-10. Village site, 1911. Looking
northwest from center of
village. (From Taylor, 1911)

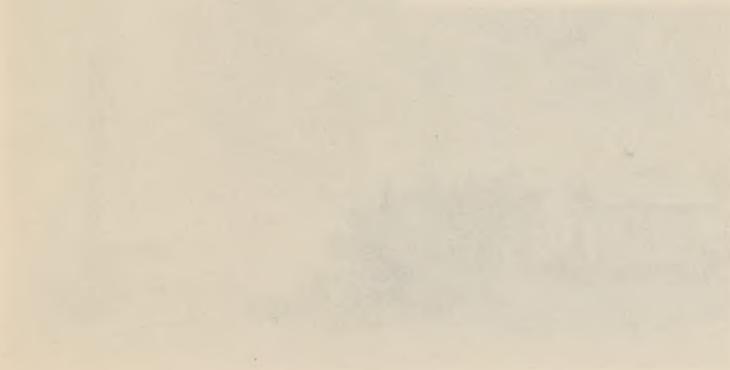
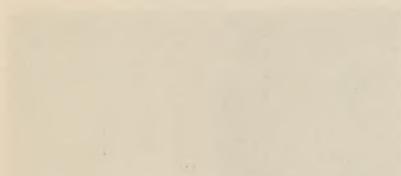


Figure 5-11. Village site, 1911. Looking
northwest from center of
village. (From Taylor, 1911)

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Figure 8.-The village of Matanuska Junction;
July, 1935. Air view towards north.
(Courtesy of Hewitt's, Anchorage.)



Figure 9

the village of Wasilla; June, 1946.
Air view towards northwest.



Figure 10.-The eastern portion of the Matanuska
Valley; July, 1935. Air view towards
northeast from point southeast of
Matanuska Junction. (Courtesy of
Hewitt's, Anchorage.)

Figure 8—The village of Matsumoto (Japan)
July 1947. Air view towards north.
(Courtesy of Hester's, Inc.)

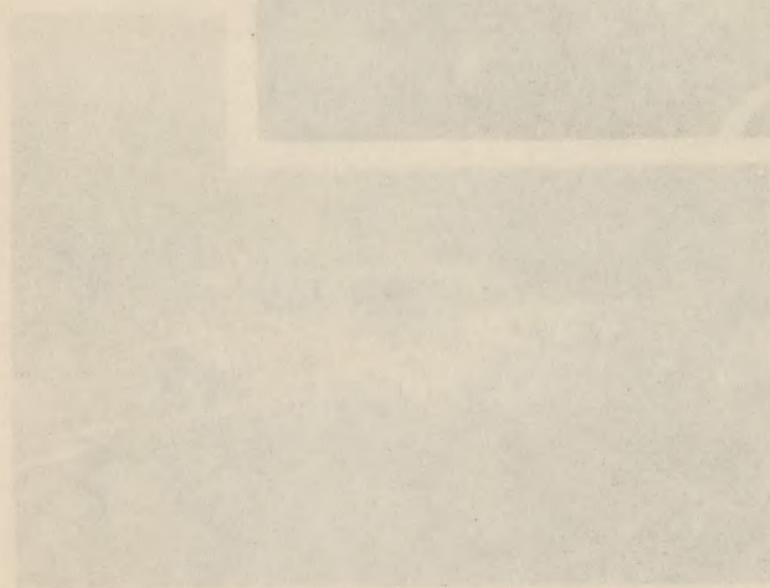
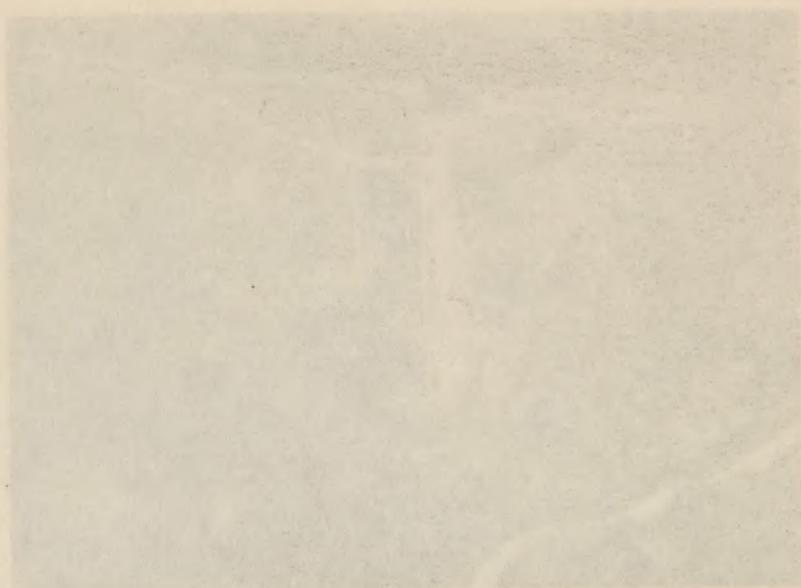


Figure 9
Village of Matsumoto, July 1947.
View towards northwest.

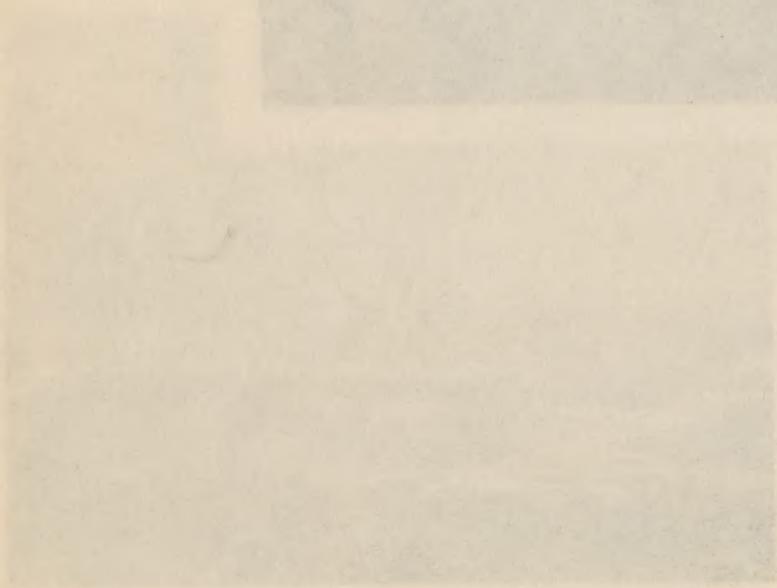


Figure 10—The eastern portion of the village
of Matsumoto, July 1947. Air view towards
east. (Courtesy of Hester's, Inc.)

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Paralleling the railroad south of the Arm is the Palmer Highway from Anchorage. Puffs of dust may be seen following cars, busses, and trucks as they trace the route of the highway around the southern and eastern sides of The Valley into Palmer. From Palmer, the roads fan out westward in a triangular and rectangular pattern and reunite at Wasilla (Fig. 5C). From the air, the northward roads from Wasilla and Palmer to the gold mines appear as narrow lines through the forest, brush, and grass and they merge at the gorge of the Little Susitna River where it flows out of the Talkeetna Mountains. Southwestward from Wasilla another road follows a course through the remains of Knik Village to Goose Bay, site of an old cannery and of a recently built airstrip at the southwestern corner of The Valley. At Palmer the Glenn Highway begins and extends northeastward out of sight up the valley of the Matanuska River to connect with the rest of the Territorial highway system. Lining the roads are frame and log houses and usually with small barns behind them.

Everywhere appear the signs of man's various recent attempts to form a basis of permanent settlement, tied together within The Valley and to the rest of Alaska. Of the attempts, it is the agricultural colonization which has resulted in the greatest increase of permanent settlers in the area.

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THE GREAT CONCEPT

1934-1937

Chapter 2

PLANS FOR THE COLONY

The plans made for the Matanuska Valley Colony were inadequate. They were made hurriedly and were based upon too few up-to-date facts about The Valley. As a result, plans were too general and when they proved to be impractical the colonizing had to proceed by trial-and-error. Sufficiently complete and recent pre-colonization study would have supplied data for adequate detailed planning. Further colonization should not be undertaken without sufficient study; the mistakes of Matanuska should not be repeated.

The Matanuska Colony was an experiment worked out in an emergency. It was part of a nation-wide program in the United States to restore to self-sufficiency families who had become destitute. There were many such families during the depression of the early 1930's. Emergency Relief Administrations were formed in many of the states and they drew their funds from the Federal Emergency Relief Administration (FERA). People needing aid were encouraged to turn to farming and organized farming projects were administered by Rural Rehabilitation Corporations. Up to December 1934, arrangements had been made with different states to rehabilitate 132,000 farm families, of which 202 were the original colonists' families sent to the Matanuska Valley. By being sent north these families were either taken off of relief rolls in the States or were kept from getting on them. One Senator stated, "We took those people to Alaska in an effort to give them an opportunity to demonstrate whether or not Alaska will be our last frontier, the last social safety valve of this country." ^{1/} In addition, Federal authorities felt that the colonists would add to greater support of the Alaskan population with more locally produced food and thereby would reduce dependence upon costly transportation.

The concept of the Matanuska Colony came into being in 1934. In the fall of that year, President Franklin D. Roosevelt instructed the administrator of the FERA, Harry Hopkins, to add Alaska to the program

^{1/} 74th Congress, 1st Session, Congressional Record, v. 79, pt. 9, p. 10278.

of organizing Rural Rehabilitation Corporations in the United States. The Matanuska Valley was picked for the proposed colony. This choice was based on general data which indicated that The Valley had qualities that were favorable for farming and for trade with nearby Anchorage and the Alaska Railroad Belt. Too, the Alaska Railroad encouraged settlement in The Valley between 1929 and 1933 in order to create additional trade along the railroad's route.

The general plan for The Colony was simple. The planning was patterned after that for the Rural Rehabilitation Corporations in the States. An Alaska Rural Rehabilitation Corporation (ARRC) was to be formed to administer The Colony. Land for The Colony was to be acquired by the ARRC with the aid of the Federal government. Settlers were to be selected from northern mid-western states where farming conditions were considered as being similar to those in The Valley. Money for The Colony was to be granted by the FERA. The Colony was to be set up as a cooperative rural community. By late in 1934 the general plan was being pushed ahead.

Detailed plans for The Colony were being formed rapidly by early in 1935. 2/ President Roosevelt signed Executive Orders to reserve land in The Valley for colonization. An army of specialists in Washington, D. C. was outlining the specifications of such items as project budgets, building plans, administrative procedures, and the use of Civilian Conservation Corps laborers from California. Michigan, Minnesota, and Wisconsin were chosen as the states where a total of 200 families of colonists were to be selected. The Emergency Relief Administration (ERA) in each of the three states was estimating the costs of colonists' clothing, household effects, medical attention, and transportation to the west coast; later on the agencies also had to draw up instructions for the selection of settlers by ERA case workers. In Alaska, Don L. Irwin, of the Matanuska Valley Agricultural Experiment Station, was selected general manager of the colonization project. Irwin was drawing up family budgets for each of the first five years of colonization and was trying to fit detailed plans from Washington to conditions in The Valley and to his own experiences. Also, Irwin was listing the qualifications of the colonists he expected to choose; however, the actual selection was transferred to the ERA's of the three states whence the settlers were to come. In Alaska, also the details of transporting the colonists from Seattle and San Francisco to The Valley were being worked out by Col. O. F. Ohlson, General Manager of the Alaska Railroad.

2/ Descriptions of the plans for The Colony are based upon detailed study of all material in the ARRC office in Palmer, Alaska and by the questioning, in person and by mail, of early administrators, colonists, and homesteaders in Alaska.

The detailed plans were being carried out by April and May, 1935. Irwin had picked the Palmer siding on the branch line of the railroad as the site for the model community center. R. L. Sheeley, of the University of Alaska's Extension Service, had taken options for purchase by the ARRC on more than 7500 acres of homesteaded land within the Colony Reserve. The land was divided into 40-acre tracts, each tract was numbered, and it was planned that every colonist-family would acquire a tract at a public drawing. The FERA granted \$600,000 to the California Emergency Relief Administration for the purchase of supplies and equipment until the ARRC was formed in April. Approximately 400 men in the Civilian Conservation Corps in California were chosen to do the early building and clearing in The Colony. Nine hundred and three colonists were selected and were started across the United States, with great fanfare, to the west coast. It had been determined that each colonist would need a loan of about \$3500 to reach self-sufficiency and plans were made to lend this amount through the ARRC. The loan was to be repaid by an amortized plan covering 30 years and including 3 percent interest. Orders for horses and cattle were placed with the ERA's of Wyoming and Montana, to be paid for with funds from the FERA. The detailed plans were numerous, and many are described in the following chapters, but the incompleteness of the plans is understandable when two points are recognized. First, all of the planning for and the start of The Colony were done between late 1934 and May 1935 -- a very short time in which to plan for a project so large and complex. Second, the planning for The Colony was based on insufficient data.

Before colonization, published data on The Valley were general and meager. The reports of early Army explorations describe The Valley in a few broad statements and were accompanied by sketch maps. The explorations were not directed to cover the area in detail, rather they were to find the better routes through it. U. S. Geological Survey reports contain some comments about The Valley but few pertain significantly to agriculture. The U. S. G. S. maps showing topography are accurate in so far as is possible when adjacent contour lines represent differences in elevation of 200 feet. However, the Survey's parties were in the region to discover and examine the gold and coal resources of the adjacent mountains and not to study The Valley's glacial deposits. ^{3/} Surveys for the Alaska Railroad's main and branch lines in The Valley were limited to the immediate vicinities of the routes to be followed.

The Experiment Station in The Valley had published annual reports since 1917. ^{4/} These reports could not include adequate descriptions

^{3/} S. R. Capps, Geology of the Alaska Railroad Region, U. S. Geological Survey Bulletin 907, Washington, 1940, pp. 14-21.

^{4/} Until 1931 the reports from the Matanuska Valley Agricultural Experiment Station were published annually by the U. S. Department of Agriculture's Office of Experiment Stations in Washington, D. C. Between 1931 and 1947 the Station's reports were released annually by the Extension Service of the University of Alaska at College. Since late in 1947 the Station has been under the U. S. Department of Agriculture's Agricultural Research Administration's headquarters in Palmer, Alaska.

of farming conditions in the area, however, because the Station had to be operated at a profit as a result of insufficient funds for maintenance and research. Therefore, studies at the Station were few and were slow in reaching completion. A soil survey of the Cook Inlet-Susitna Region had been published by the U. S. Department of Agriculture and was available for colonization planning. ^{5/} The survey in The Valley was a reconnaissance which was made with pack horses during a two-week period in 1914. At that time there were only two main all-weather trails in The Valley. Mapping must have been difficult. Within the Colony Reserve nearly all of the drier soils were mapped as Knik loam and the larger areas of swamp were designated. This map and the report were hardly sufficient for detailed planning for a colony of farmers. Yet, in 1934 just one precolonization study was made; it was done by a professional administrator in just two days. This neglect of precolonization study was in spite of advice offered in the soils report, "It would be unwise for the prospective agriculturalist to rush into this country without some preliminary knowledge of the true conditions. The same is true of all new regions." ^{6/}

Unknown or poorly known features of The Valley were many during planning for The Colony. Russian and Indian experiences might have been collected as guides for occupations supplementing farming. The climate of the area was known only from 15 years of observations at the Experiment Station and local and annual differences could not be anticipated properly. The capability of the land for farming in most of the colonists' tracts was known poorly and was not mapped until 1939 and 1940. The geology of The Valley, particularly with respect to the location and nature of the ground water table, was a question unanswered. Farm management had to be primarily by experiment. Grazing and timber inventories were undone until 1939 and 1941 respectively. Marketing possibilities for colonists' produce were based upon the amounts and valuations of goods shipped to Anchorage and to all Alaska in 1930. Research on the supply of and demand for labor had not been done. Without these studies it was, of course, very difficult to make dependable estimates of expenses either to the ARRC or to the individual colonists; actually The Colony cost nearly five times the estimate made in May, 1935. Finally, it appears quite doubtful that experiences from group settlements in similar areas in the world, such as, the Canadian Peace River country, were analyzed carefully and substituted for the lack of precolonization study in The Valley.

^{5/} U. S. Department of Agriculture, Bureau of Soils, Field Operations of the Bureau of Soils, 1914, Washington, pp. 47-138 and Plate 1.

^{6/} Ibid., p. 43.

In general, the most significant lesson from the Matanuskan experiment is in the field of planning. To hurry the planning of group settlement in Alaska is to eliminate essential study upon which the planning must be based. By eliminating the basic studies the permanence of new settlement is endangered and added difficulties are imposed upon the administration of the new settlement.

Part III

DEVELOPMENT OF THE COLONY

1932-1940

ADMINISTRATION OF THE COLONY

Some of the early equipment of the Colony was insufficient. It was necessary to make a check of inventory through administrators trying to discover the gaps during settlement. Administrative instruction in Washington was organized somewhat loosely. For instance, the Alaska Home Colonization Corporation was tardy. The administrative responsibilities, some of the administrators had spent Alaska experience and training in the administration of cooperative agricultural colonization. The initial results were excellent and higher order of administration than had been anticipated. However, the administration has been made less extensive and is now proceeding in an orderly fashion.

Part III

DEVELOPMENT OF THE COLONY

Small supervision was by administrators in Washington when the Colony was set up. Since then, the supervisory function has been done in an advisory and which is poorly defined. Upon incorporation the ABC began receiving funds from the FERA in Washington and was under the general direction of Mr. Hopkins, FERA Administrator. On the 10th of February, 1935 the Corporation's activities were directed from the FERA and Federal funds were transferred to the Works Progress Administration. Mr. Hopkins was Administrator and received general supervision of the ABC until late in 1935. During those three years, Mr. Hopkins' interests were represented by his employees, other district directors in Washington or administrative "work-shoppers" sent to the Matanuska Valley for short stays. On September 2nd, 1935, Mr. Hopkins transferred to Secretary of the Interior John M. Gurnea and now control of the Matanuska Colony. However, the general "control" has not been defined and the Secretary's only supervisory authority is that of Director of the Corporation's nine shares of stock. Furthermore, the ABC was incorporated as a private, charitable organization. It will be that status although it is considered by some people to be a quasi-governmental agency. Actually, the Department of the Interior is only indirectly related to the corporation by two executives in the Department being members of the ABC Board of Directors. The line of authority regarding general supervision from Washington to the Corporation has been clear with this and it appears advisable to leave the control of settled Alaska matters in the hands of qualified Alaskans.

1935-1948

Part III

DEPARTMENT OF THE COAST

1932-1948

Chapter 3

ADMINISTRATION OF THE COLONY

Some of the early management of The Colony was inefficient. It was necessarily so. Lack of information plagued administrators trying to correct the plans during settlement. Administration in Washington was organized somewhat loosely. Formation of the Alaska Rural Rehabilitation Corporation was tardy. The administration was too paternalistic. Few of the administrators had enough Alaskan experience and training in the administration of cooperative agricultural colonization. The initial results were confusion and higher costs of administration than had been anticipated. However, the administration has been made less expensive and is now proceeding in an orderly fashion.

Overall supervision was by administrators in Washington when the Colony was set up. Since then, the supervisory function has been changed to an advisory one which is poorly defined. Upon incorporation the ARRC began receiving funds from the FERA in Washington and was under the general direction of Mr. Hopkins, FERA Administrator. On the 15th of February, 1936 the Corporation's activities were divorced from the FERA and Federal funds were granted through the Works Progress Administration. Mr. Hopkins was the WPA administrator and remained general supervisor of the ARRC until late in 1938. During these three years, Mr. Hopkins' interests were represented by his employees, either administrators in Washington or administrative "trouble-shooters" sent to the Matanuska Valley for short stays. On September 3rd, 1938, Mr. Hopkins transferred to Secretary of the Interior Ickes all interest in and control of the Matanuska Colony. However, the phrase "control of" has not been defined and the Secretary's only supervisory capacity is that of trustee of the Corporation's nine shares of stock. Furthermore, the ARRC was incorporated as a private, charitable organization. It still has that status although it is considered by some people to be a semi-governmental agency. Actually, the Department of the Interior is only indirectly related to the Corporation by two executives in the Department being members of the ARRC Board of Directors. The line of authority, regarding general supervision, from Washington to the Corporation has grown dim with time and it appears advisable to leave the control of detailed Alaskan matters in the hands of qualified Alaskans.

The Colony's first administrative agency was the California Emergency Relief Administration (CERA). Detailed plans for colonization were being carried out before the ARRC was formed. Therefore, it was necessary to have some agency control the initial funds granted for settlement. The CERA was selected, it has been reported, because that agency was the only west-coast ERA not engaged in legal disputes early in 1935. The first grant of colonization funds was made to the CERA and there purchase orders were made out for supplies, equipment, and food. It is likely that this purchasing function overloaded the CERA and the result was confusion in the early administration of The Colony. Administrators in Palmer did not know what materials had been ordered or what might be expected to arrive at any time. Attempts to have duplicates of the purchase orders, invoices, or shipping lists sent to Palmer ahead of or with shipments were unsuccessful. It was this administrative arrangement which was responsible for the uncoordinated and unexpected arrival of materials and food in Palmer -- an ill-timing which has been criticized long and loud by nearly every person in The Colony.

In addition to the CERA, two other groups of people participated in the overall administration of The Colony early in 1935. The groups were the board incorporating the ARRC in Juneau and the FERA officials in Washington. Each issued orders, occasionally contradictory, to the man in charge in Palmer; the result was an intolerable situation. In planning for additional settlement in Alaska it is advisable to prevent the recurrence of interim appointments for administration and of multiple agency responsibility.

Direction of The Colony was the function of the ARRC, better known as the Corporation. The ARRC was incorporated on April 12th, 1935 under the Alaskan laws relating to charitable agencies. It was to be a non-profit corporation, given broad powers to operate anywhere for no longer than fifty years. The Articles of Incorporation were drawn up from a standard form used for the incorporation of Rural Rehabilitation Corporations in the United States. The primary purpose for which the Corporation was formed is stated to be "To rehabilitate individuals and families as self-sustaining human beings by enabling them to secure subsistence and gainful employment from the soil, from coordinate and affiliated industries and enterprises or otherwise, in accordance with economic and social standards of good citizenship." ^{1/}

^{1/} Articles of Incorporation of Alaska Rural Rehabilitation Corporation, Juneau, Alaska, 1935, p. 1.

Eleven other objects and purposes in the Articles define specific powers by which the Corporation may accomplish its primary objective and express provision is made that the statements shall not be considered to restrict the Corporation's powers in any manner.

The Articles provide for a Board of nine Directors to guide the Corporation's activities. Every director is furnished one share of non-transferable stock which carries the power of one vote. Originally the stock had no nominal or par value but the first directors set a value of \$100 on each share. Upon receipt of a share of stock a director now signs a blanket assignment which is forwarded to the Department of the Interior, where the stock is held, and at the end of a director's service his certificate of stock is cancelled. In managing the Corporation, the Board of Directors is instructed in the Articles to maintain the corporate indebtedness at no more than \$500,000 at any one time and to see that any profits which might be gained are used to maintain and promote rural rehabilitation in Alaska. Upon dissolution of the ARRC any remaining money is to be offered to the Territory for the continuation of Alaskan rural rehabilitation work.

Members of the ARRC Board are self-perpetuating as directors. This situation is criticized for being undemocratic, but self-perpetuation could be corrected by simple modifications of a by-law. The Articles designate that the majority of the directors should "... be members of the Emergency Relief Administration of Alaska or members of its staff, so long as it is continued and thereafter the membership of the Board of Directors shall be constituted as the by-laws shall then provide." 2/ The pertinent by-law stipulates that directors are to be elected at the annual meeting of stockholders "... to serve until the next annual meeting or until his successor shall be elected and shall qualify." 3/ Further, a director may resign or he may be removed from office by a majority vote of the stockholders and in the event of vacancies the remaining directors are to choose successors. In practice, the directors have picked successors but since 1938 the replacements elected have been men suggested by the Department of the Interior. It appears desirable that the Board of Directors continue to guide the ARRC's operations. However, whether or not the Corporation is to be a part of any proposed settlement in Alaska, as suggested in the preface, the by-law quoted above might be changed to state a definite period of service for a director.

There is criticism with respect to the Board of Directors that is more serious than the element of self-perpetuation. It is that the qualifications for directorship are not defined and that a director

2/ Articles of Incorporation of Alaska Rural Rehabilitation Corporation, op. cit., p. 5.

3/ Alaska Rural Rehabilitation Corporation, By-Laws, p. 2.

serves without pay. The present Board is composed of: a president, who is the Director of the Interior Department's Division of Territories and Island Possessions, in Washington, D.C.; a vice-president who is a retired Federal employee with business headquarters in Wrangell, Alaska; the Governor of Alaska, in Juneau; three business men in Anchorage; and three farmers in the Matanuska Valley. To participate actively in the Corporation's business these men must assemble in Palmer for one day during the first week of each August. Three of the men are absent from The Valley nearly all of the year, all are busy with their own affairs, and summer in Alaska is distinctly the time when every person "makes hay" long hours each day. It is suggested that men should be selected for the Board who have had personal experience with farming in Alaska and with the administration of settlement, particularly of group settlement. Some of these men likely would be specialists. But, why should not all of the directors be paid for their time as many corporate directors are paid? The ARRC is no longer a relief agency except in name which, incidentally, might better be the Alaskan Settlement Council. By the addition of qualifications and salary for each director, attendance at more than one meeting per year could be stimulated. Thus, the General Manager could derive greater and more specialized guidance than is now possible without imposing upon the Board.

The original administrative plan for The Colony separated the work into ten divisions under a general manager. The directors of the divisions of health and construction were to report directly to the general manager. To the assistant to the general manager were to report, the supervisors of the divisions of maintenance, operation, industries, farming, marketing, procurement, administration, and the dormitory. The plan outlined positions for 14 persons in supervisory capacities and 289 other employees. In addition, allowance was made for the employment of 30 female colonists for 60 days and 34 male colonists for 30 days. The plan was clumsy administratively and a more condensed division of duties was used when colonization began.

Nine men made up the first administration of The Colony. During the period of construction a special administrative assistant was in charge and to him an executive assistant and seven division chiefs reported. The work assigned to the divisions and their administrative relationships are shown in Figure 11. This organization was used to facilitate the completion of construction of essential buildings and Irwin, General Manager of the ARRC, was director of the Farming Division while the plan was in effect. After the first few months of construction, the special administrative assistant and his executive assistant returned to Washington and Irwin took charge of all operations.

Several persons in the early administrations exercised strong control of many phases of colonization. Colonists have complained that

MATANUSKA VALLEY COLONY, ALASKA

ADMINISTRATIVE ORGANIZATION

- 1935 -

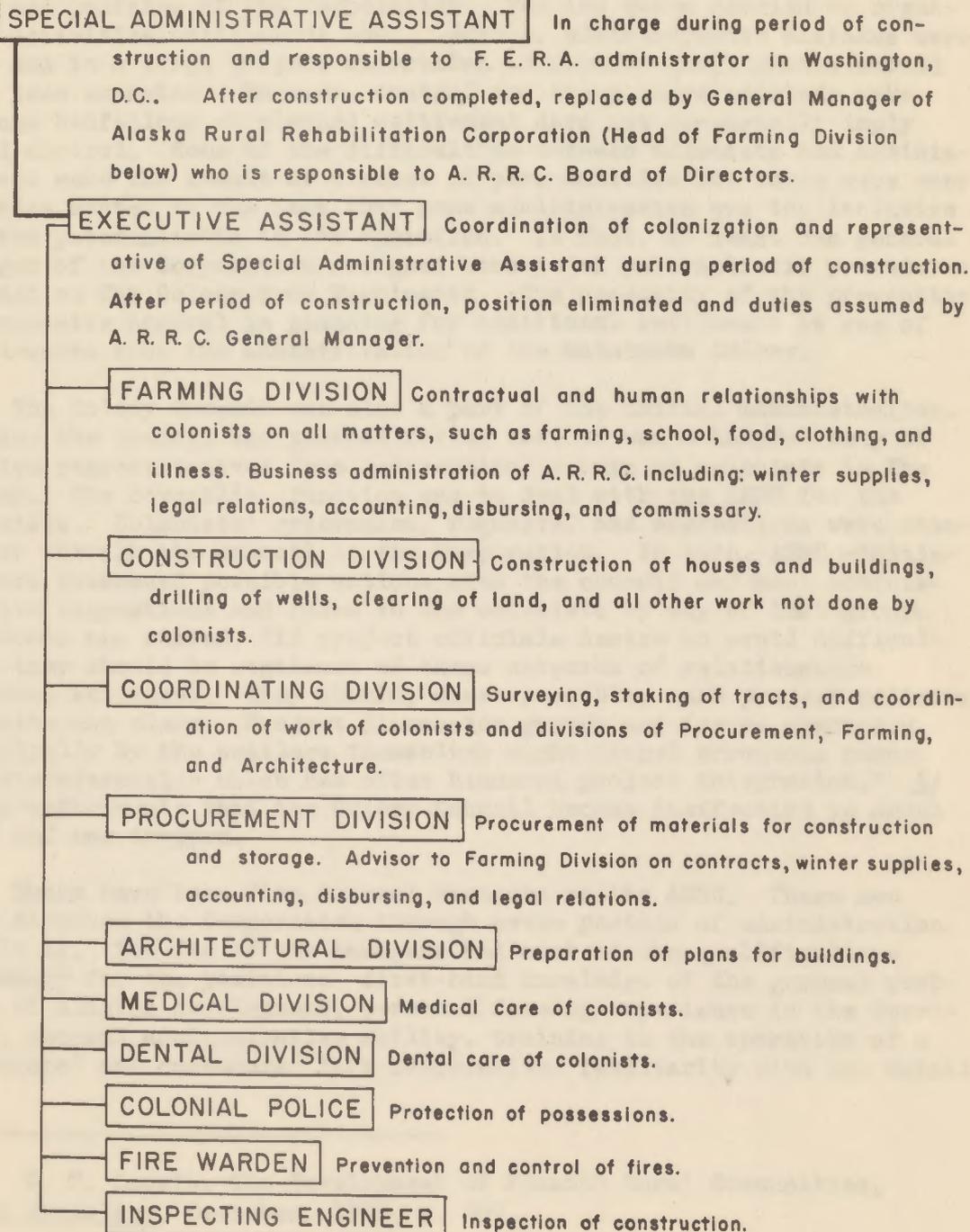


Figure 11

MATANUSKA VALLEY COLONY, ALASKA

ADMINISTRATIVE ORGANIZATION
1955

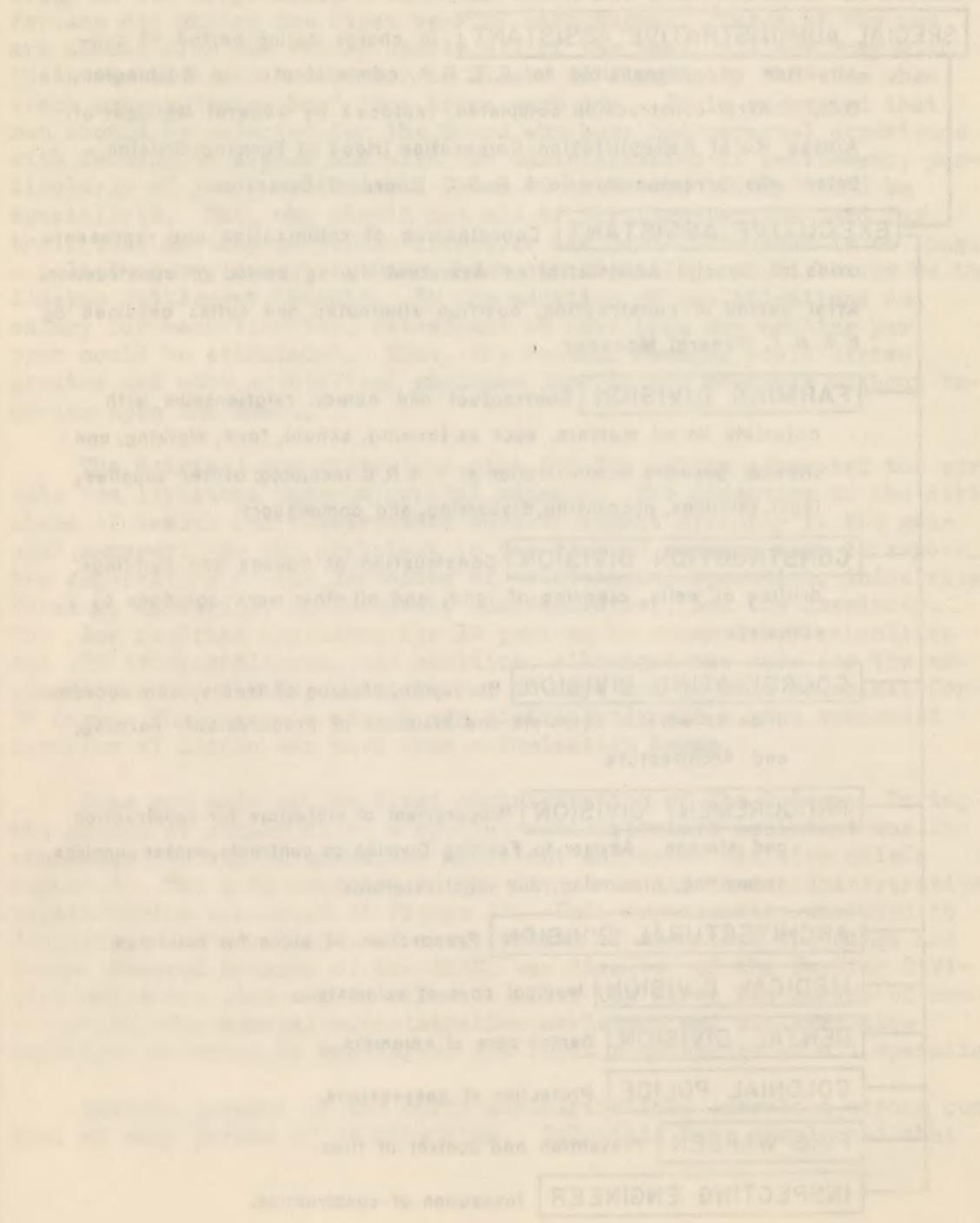


Figure 11

they were given no chance to express individuality or "to go on their own" but rather were herded through various phases of colonization as a group incapable of thinking. Examples of regimentation were the standardization of: building plans, allotment of equipment, materials, and artificial money, and assignment of labor. In 1939 the leaders of colonists opposed to strict control organized a secret inner council, known as the Ice Worms, and issued typewritten broadsides attacking the acts and policies of the Corporation. The Ice Worms carried on organized activities until about 1942. Surely, administrative mistakes were made and in a large project undertaken so rapidly misjudgments should have been expected. However, control and the pioneer attitude make strange bedfellows -- planned settlement does not necessarily imply rigid control. Some of the difficulties between colonists and administrators were the result of clashes of personalities but there were many troubles rooted in the fact that some administration was too inclusive and too paternalistic in its operation. In fact, at least one general manager of the Corporation resigned because of paternalistic procedures imposed on The Colony from Washington. The necessity of the prevention of excessive control in planning for additional settlement is one of the lessons from the administration of the Matanuska Colony.

The Colony Council was also a part of the initial administration. Whether the council was planned for or not, it was a helpful body of elected representatives from geographical groups of colonists in The Valley. The council's function was to deal with the ARRC for the colonists. Colonists' grievances, requests, and suggestions were channelled through the council to the Corporation. In turn, ARRC administrators discussed possible actions with the council and sent administrative suggestions and rules to the colonists by way of that group. As Loomis has stated, "If project officials desire to avoid difficulties they should be cognizant of these networks of relationships (between settlers). They should, where possible, make project policies definite and clear. Project discussion groups and forums conducted principally by the settlers themselves might dispel erroneous rumors and misinformation which has often hindered project integration." ^{4/} It is unfortunate that the Colony Council became ineffective in about 1938 and was dropped.

There have been five General Managers of the ARRC. These men have directed the Corporation through seven periods of administration (Table 1). Too few of the managers had most of the qualifications necessary for the position: first-hand knowledge of the general problems of Alaskan development, personal farming experience in the Territory, general administrative ability, training in the operation of a producers' and consumers' farm cooperative, familiarity with the details

^{4/} C. P. Loomis, *The Development of Planned Rural Communities*, *Rural Sociology*, December, 1938, p. 409.

Table 1.- General Managers of the Alaska Rural Rehabilitation Corporation

Years	General : Manager	Occupation Before : Managership	Work Before Managership
1935	D.L. Irwin	Agriculturalist	Manager of Matanuska Valley Agricultural Experimental Station; rancher and legislator in Wyoming.
1935-1937	R.L. Sheely	Agriculturalist	Director, Coordinating Division of 1st Colony administration; director of Extension Division of University of Alaska.
1937-1938	L.B. Jacobs	Administrator	Director of Architectural Division of 1st Colony Administration; administrator in Washington, D.C.
1938-1940	R.L. Sheely	Farmer	Dairy farming in Matanuska Valley.
1940-1945	H.C. Hanson	Botanist	University Professor and Director of N. Dakota Agricultural Experimental Station.
1945-1947	D.L. Irwin	Agriculturalist	Manager of Matanuska Valley Agricultural Experimental Station.
1947-present	C.W. Peters	Economist	Specialist for Farm Security Administration on cooperatives in Pacific Northwest of United States.

of corporate and real estate accounting procedure, experience with farm family budgeting, and the ability to work harmoniously with various kinds of people. However, most of the managers made sincere attempts to help the colonists progress and the Colony did grow. If criticism is useful, it should be directed toward the selectors of past managers rather than the managers themselves. As plans for proposed group settlement are formulated it is recommended that the above qualifications be used as part of the bases for selection of administrators.

The Corporation's staff has become smaller with the reduction of scope of the ARRC's operations. The number of people employed during the first two years of colonization could not be determined exactly from available records. Several colonists have claimed that there were too many administrators and assistants at first but this statement is not proved. Records show that 14 administrative personnel went to The Valley in May and June, 1935 and by May, 1936 the number was 16. The 420 men from California transients' camps were under the Corporation in 1935 as well as an undetermined number of laborers who were imported from the States and elsewhere in Alaska in 1935 and 1936. In those two years of construction, also, several administrative "trouble-shooters" went to The Valley from Washington for short periods but their time is not shown on available records. On April 30, 1939 the ARRC employed 14 administrative personnel and a total of 41 non-colonists. Up to that time the Corporation directed nearly every phase of settlement. But after 1939 the cooperative was administered by its own staff. From 1939 to 1942 the number of ARRC employees decreased to a low of four persons. By 1946 employees numbered 16, an increase in order to complete clearing of land that the Corporation had obligated itself to do in 1937. In 1948 there were only six employees and it is unlikely that the staff will number more unless the ARRC is used in proposed group settlement.

The present small staff has two primary functions left: the collection of colonists' accounts and the extension of a limited number of loans for farming development in the Matanuska Valley. The secondary functions are: administration of a \$200,000 loan to the Matanuska Valley Farmers Cooperating Association, completion of the obligated clearing work, the approval of applications to purchase public land in the present Colony Reserve, the increase in size of the original 40-acre tracts, the sale of lots in Palmer that are held by the ARRC, and participation in programs for the improvement of living and working conditions in The Valley.

The cost of administering The Colony was relatively high at first. Exact annual costs for the first seven years are unknown because complete records are not available in Palmer, but for the whole period administrative expenses were approximately 9-1/2 percent of the total

cost of seven years' colonization. The cost during the first year of colonization was at least double the anticipated figure. In May, 1935 administration was budgeted \$2394 per month or \$28,728 for a year. 5/ Yearly administrative expenses through October, 1942 averaged \$47,600, about 63 percent more than was allowed for, and salaries averaged \$32,640 of the total expenses (Table 2). 6/ Yet, the actual expenses for salaries in the fiscal years, closing in June, were: for 1940 \$35,973, for 1941 \$23,285, and for 1942 \$12,016. 7/ These figures show that the average yearly administrative cost of \$47,600 is high for the later years in the period and is probably considerably less than the actual cost of administration in the first two or three years of The Colony's life. Also, at least \$10,000 should be added to the first year's expenses for administrative work on The Colony in the United States. During the fiscal year which ended in June, 1948 the Corporation's salaries totaled \$15,986. 8/

It is inadvisable to use the above average or exact costs for future planning. In the first place, the administration of the Matanuska Colony controlled more of the settlement activities than is necessary or desirable at the present time. Secondly, detailed analyses of expenses are difficult, if not impossible, to make because of inadequacies in early accounting methods and incompleteness of records. Third, excessive administrative costs were introduced by the use of the California ERA on a temporary basis, by the use of non-colonist labor in the early years, and by the lack of coordination of activities during the period of construction. It is not surprising that the administration of The Colony was expensive in the early years.

The cost of administration reflects some of the difficulties of management. These troubles were the products of many inadequacies rather than a single error of omission or commission by an administrator. However, high on a list of reasons for difficulties would be the lack of precolonization study, the speed of settlement, and the lack of administrative experience. The significance of these reasons is repeated in analysis of one of The Colony's physical bases -- its land.

5/ Alaska Rural Rehabilitation Corporation, File No. 100, Administration and Organization, Alaska Project Budget Cost Summary, Revised May 21, 1935.

6/ W. W. Head, Audit Report for the Alaska Rural Rehabilitation Corporation, 1942, v. Two, p. 42.

7/ W. W. Head, ibid., v. One, Summary of Cash Disbursements, p. 7.

8/ Alaska Rural Rehabilitation Corporation, Financial Statements -- June 30, 1948, p. 3.

Table 2.- ARRC Administrative Expenses, June 1, 1935 to October 31, 1942*

<u>Item</u>	<u>Cost</u>
Administrative and accounting salaries	\$242,082.10
Organization and legal expenses	29,798.00
Office expenses, stationery and supplies	16,628.45
Telephone and telegraph expense	8,991.85
Insurance	13,598.10
Colonist welfare (agricultural instruction, Home economics, recreation and other)	41,130.24
Subscriptions for colonists (National Rifle Association, periodicals, etc.)	398.67
Miscellaneous	328.66
Total administrative expenses for first 89 months of colonization	\$352,956.07

*W. W. Head, Audit Report for the Alaska Rural Rehabilitation Corporation, 1942, v. Two, p. 42.

Chapter 4

LAND FOR THE COLONY

The Colony was started in an 11-township reserve. The beginning was on about 10,000 acres between the eastern edge of The Valley and the Seward Meridian, in the center of the area. Three-fourths of this acreage was bought by the Corporation from homesteaders; purchase, rather than acquisition by grant, was expected. On the land were located 208 tracts, most of them of 40 acres. Each colonist obtained a tract by lot. Most of the tracts were on The Valley's better land for cultivation. However, the farms generally were too small and enlargement of tracts became one of the Corporation's unexpected early duties. About 40 of the original tracts have been enlarged by consolidation or by additional purchases of land. At the present time, the Corporation has nearly all of its land in farms, expansion is more difficult, and the 40-acre size remains a problem. With careful precolonization study and unhurried planning, the administration of land in new areas of settlement need not be so troublesome as it was in The Valley.

Land was reserved for The Colony on February 4th, 1935. At that time President Roosevelt signed Executive Order 6957. The order prevented anyone appropriating and settling on vacant, unrestricted, public land in 11 townships in The Valley. The reserve included the area from Knik Arm northward to the Talkeetna Mountains and from the eastern edge of The Valley westward to three to nine miles west of Wasilla (Fig. 12). On May 20th, Executive Order 7047 was signed to permit settlement in the reserved area in order that colonization could proceed.

Reductions have been made in The Colony's reserve. It is now composed of the originally reserved eight townships east of the Seward Meridian and about 16 sections of Knik Arm tidal flats west of the Meridian (Fig. 12). The latter is known as the Hay Flats and was set aside by two Executive Orders as pasture for the colonists' cattle and as a source of hay. The northern nine sections were withdrawn from settlement by Executive Order 7126-a on August 5th, 1935; the next day the southern seven sections were added to the reserve by Executive Order 7128.

MATANUSKA VALLEY, ALASKA LAND RESERVED FOR COLONIZATION

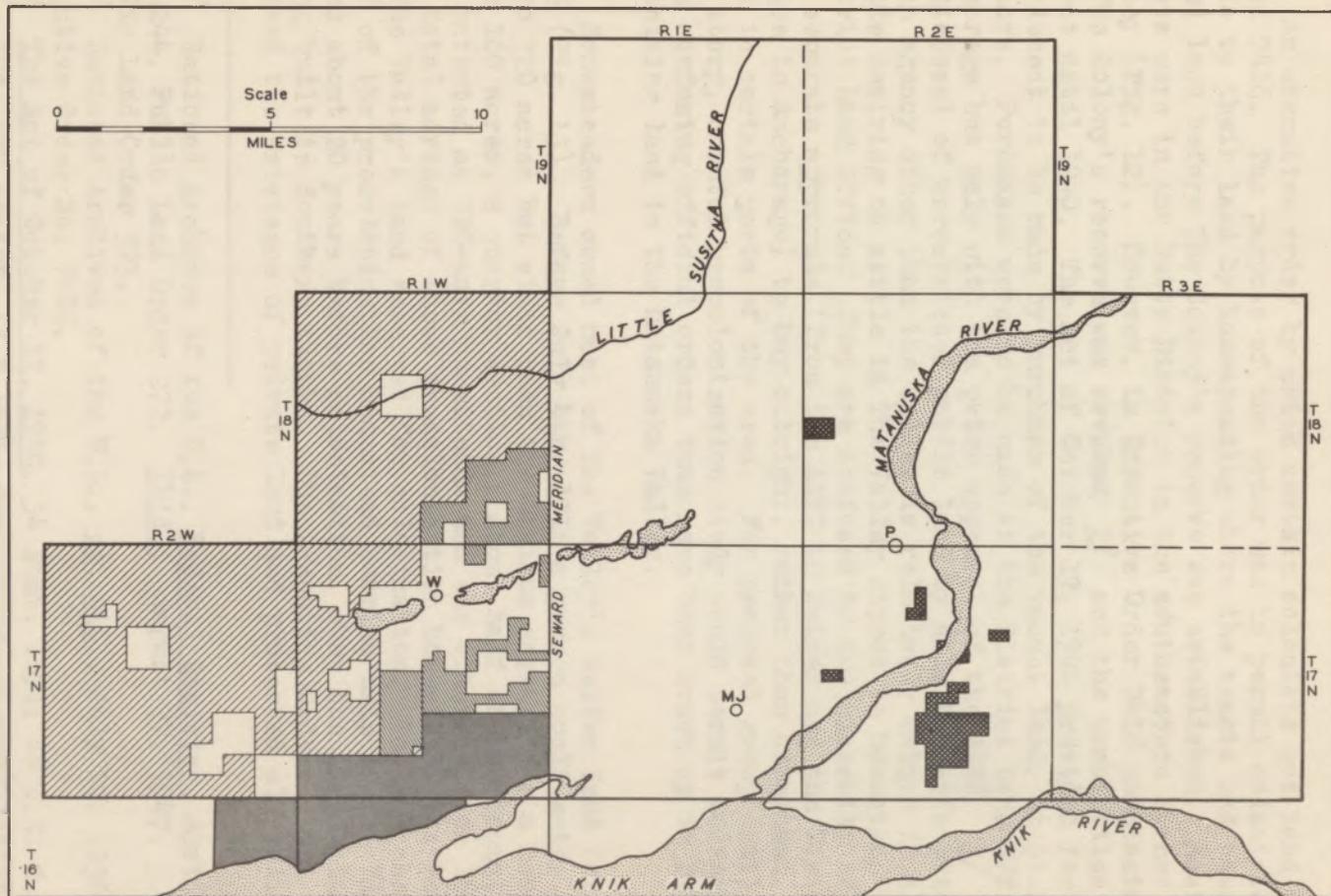


Figure 12

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| <p>— BOUNDARY OF AREA RESERVED FOR COLONIZATION, EXCEPTING VALID EXISTING RIGHTS IN FEBRUARY AND MAY, 1935.</p> <p>■ "HAY FLATS" RESERVED IN AUGUST, 1935 AS COLONISTS' PASTURE AND SOURCE OF HAY.</p> <p>▨ COLONISTS' TRACTS REMOVED FROM RESERVE AND OPENED TO HOMESTEADING IN JULY, 1936.</p> | <p>▧ AREA REMOVED FROM RESERVE AND OPENED TO HOMESTEADING IN APRIL, 1945.</p> <p>▩ AREA REMOVED FROM RESERVE AND OPENED TO HOMESTEADING IN AUGUST, 1947.</p> <p>○ SITE OF VILLAGE: P-PALMER, W-WASILLA, MJ-MATANUSKA JUNCTION.</p> |
|--|--|

By two Public Land Orders, the remainder of the non-privately-owned land in the part of the reserve west of the Seward Meridian was opened to homesteading in 1945 and 1947 to meet demands of veterans of World War II. ^{1/}

An executive order by which certain colonists got land was that numbered 7416. The purpose of the order was to permit colonists to get title to their land by homesteading where the tracts had been publicly-owned land before The Colony's reserve was established. Most of such tracts were in the Butte District in the southeastern corner of The Valley (Fig. 12). However, in Executive Order 7416 permission to settle in The Colony's reserve was revoked ^{2/} and the prohibition remained in effect until 1940. The Act of October 17, 1940 provided for additional settlement to be made by purchase of the vacant land, at \$1.25 to \$5.00 an acre. Purchases were to be made at the District Land Office in Anchorage but only with the prior approval of the ARRC. ^{3/} This method of disposal of unrestricted public land by sale but with prior approval by an agency other than the seller is relatively unique in Alaska. Most people desiring to settle in The Valley expect to homestead through the District Land Office. They are confused by the necessity of obtaining two separate approvals (from the ARRC in Palmer and the District Land Office in Anchorage) to buy outright, rather than homestead, public land in certain parts of the area. For proposed group settlement in the Territory, careful precolonization study would permit making fewer and less confusing official orders than have been drawn up in relation to colonizing land in the Matanuska Valley.

Homesteaders owned most of The Valley's better land for farming in 1935 (Fig. 13). Before July 4th, 1916 a person could enter and patent ^{4/} up to 320 acres but since then the maximum acreage for a homestead has been 160 acres, a quarter section. About half of the homesteaded land was patented as 320-acre homesteads and the other half as 160-acre homesteads; the total acreage of these precolonization homesteads was more than half of The Valley's land reserved for colonization. Table 3 shows that over half of the precolonization homestead entries made in The Valley were filed about 20 years before colonization, when the Alaska Railroad was being built in Southern Alaska. The Executive Orders noted above recognized the existence of private land and protected all valid entries.

^{1/} National Archives of the U.S., Federal Register, April 20, 1945, p. 4244, Public Land Order 272. Ibid., August 27, 1947, p. 5759, Public Land Order 393.

^{2/} National Archives of the U.S., op. cit., July 22, 1936, p. 993, Executive Order No. 7416.

^{3/} The Act of October 17, 1940, 54 Stat. 1191; 48 U.S. C. 353 Note.

^{4/} The term "enter" is a legal description of application by a person to a District Land Office for permission to start occupying surveyed public domain under the provisions of the Homestead Law. The term "patent" refers to gaining title to public domain by compliance with the provisions. For details of the homesteading regulations see: U.S. Dept. of the Interior, Information Relative to the Disposal and Leasing of Public Lands in Alaska, General Land Office Information Bulletin, Information Series, No. 2, Washington, D.C., 1939, pp. 2-4.

Table 3

NUMBER OF ENTRIES TO HOMESTEAD IN MATANUSKA VALLEY TOWNSHIPS, 1914-1934*

Year of Entries	Townships in the Colony's Reserve											Unreserved Townships						Total Yearly Entries
	17N 2W	17N 1W	18N 1W	17N 1E	18N 1E	19N 1E	17N 2E	18N 2E	19N 2E	17N 3E	18N 3E	15N 3W	16N 3W	17N 3W	16N 2W	16N 1W	19N 3E	
1914**					1													1
1915		11		44	32							6		4				97
1916	10	20	3	16	31		13	29			1	3	1				127	
1917	6	10	2	8	10		22	23	2			1				4	88	
1918		7		4			8				1			1		2	23	
1919		2			2		1	3			2						10	
1920				2			4	2									8	
1921		3		2	1			5									11	
1922		2		2	4		2	1									11	
1923		2	1	1		1	4	2	3								14	
1924	1	4		3	2	1	1	4	1			1		2		1	21	
1925	1			4	2			1									8	
1926		4		5	3		3	2			1			1		1	20	
1927		5		2	4			2								1	14	
1928		1		8	4											1	14	
1929		2		6	1		2	1						1			13	
1930				1	4		1	3					1				10	
1931		1	3		5		6	5									20	
1932		7		3	14		4	5									33	
1933		3	1		2			3									9	
1934		1			2		4	4					1				12	
Totals	18	85	10	111	124	2	75	95	6	0	0	5	11	3	9	0	10	564

1914-1934***

* Compiled from tract books in District Land Office of Bureau of Land Management, Anchorage, Alaska.

** The official survey began in The Valley in 1914. Prior to that time, intention to homestead was filed with the U. S. Commissioner at Knik Village.

*** A few of the entries were not patented.

MATANUSKA VALLEY, ALASKA - OWNERSHIP OF LAND, 1934

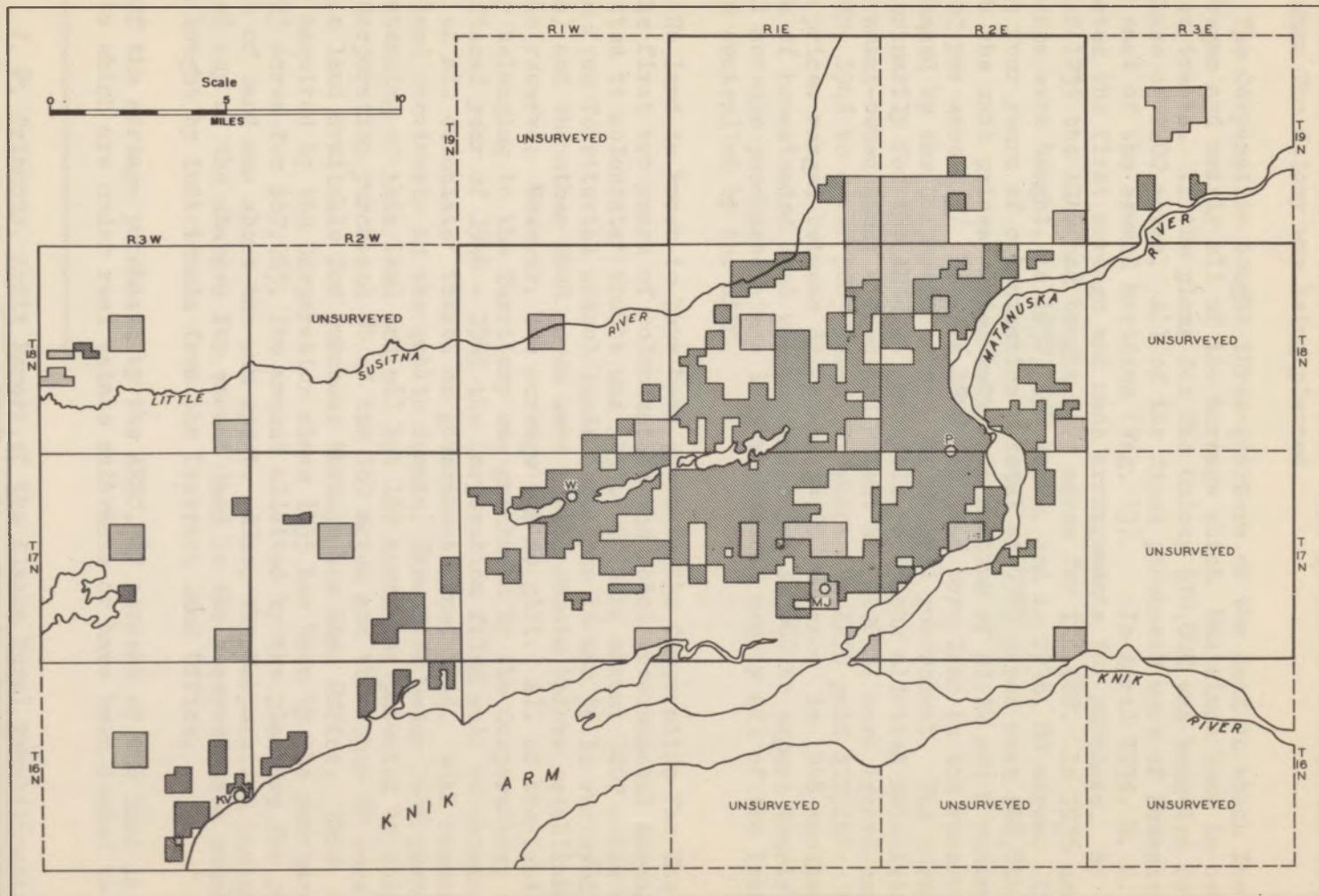


Figure 13

BOUNDARY OF AREA RESERVED FOR COLONIZATION, EXCEPTING VALID EXISTING RIGHTS, IN FEB. AND MAY, 1935.
 LAND RESERVED; CLOSED TO ENTRY FOR HOMESTEADING.
 LAND PRIVATELY OWNED; ACQUIRED ORIGINALLY BY HOMESTEADING.
 O SITE OF VILLAGE: P-PALMER, W-WASILLA, MJ-MATANUSKA JUNCTION, KV-KNIK VILLAGE.

Therefore, the orders actually made available for colonization little land that was suitable for cultivation and purchase of land was allowed for when The Colony was being planned.

The Corporation bought three-quarters of the land on which The Colony began and nearly all of the acreage which has since been in colonization tracts. In the plans for The Colony \$70,000 was budgeted for the purchase of 2200 acres. All of the first purchases were of homesteaded land east of the Seward Meridian (Fig. 13). In April 1935, R. L. Sheely selected the first acreage and made arrangements for purchase. By the end of 1935 the ARRC had bought 7473 acres for \$46,680. In 1936 another 63 acres were bought, in 1937, 158 acres, and in 1938, 86 acres. In these first four years of colonization a total of 7780 acres cost \$48,814, for which the unit prices varied between a minimum of \$1.24 and a maximum of \$36.42 per acre. ^{5/} Between 1938 and 1946 more land in the reserve was purchased by the Corporation from the Federal government. The purchase was primarily for the ARRC to get title to tracts allotted colonists from government-owned land; a deed and Patent No. 1120981 were issued on May 27, 1946 to cover 5083 acres for which the ARRC paid \$12,248. The unit prices ranged between \$1.25 and \$4.00 an acre. In 1948 another 160 acres of homesteaded land was purchased for \$6,000 to expand tracts. The total acreage purchased since 1935 represents nearly all of the land directly controlled by the ARRC.

No land is known to have been given to the Corporation for The Colony. In the first two years of colonization the total governmental acreage allotted to colonists' tracts was 3455. Of this amount 1007 acres were taken from Territorial school lands (sections 16 and 36 in surveyed townships) and the other 2448 acres were public domain before establishment of the reserve. However, the acreage was no gift. All of the land formerly belonging to the Territory was purchased by the Corporation; in the fiscal year of 1944 - 1945 the Corporation filed suit to obtain control of all colonists' tracts on government-owned land. With regard to the land previously in the public domain, Executive Order 7416 permitted homesteading of this land and all but 160 acres was patented by colonists; the Corporation purchased 80 of the 160 acres and the other 80 were made public land available for purchase through the Land Office. Thus, the land acquired by the Corporation since 1935 has been by the purchase of 13,023 acres for \$67,063; the amount allotted by the planners for purchase of land was about the sum spent. Also, the Corporation has not received any of the charges for vacant land in the reserved area which has been bought by individuals from the District Land Office.

Of the acreage purchased by the ARRC, 83 percent of the land is in tracts which are under real estate contracts or have been deeded to private

^{5/} J. P. Crimmons, Audit Report of the Alaska Rural Rehabilitation Corporation for the Period May 1935 to December 31, 1938, Washington, D.C., October 12, 1939, Pt. X, pp. 12-17.

owners. The gradual disposition of this land has been described periodically in reports of the general managers, copies of which have been sent to members of the Board of Directors. The unassigned 17 percent of the Corporation's land, totalling 2236 acres in 1948, included: small acreages scattered in Townships 17 and 18 North, Ranges 1 and 2 East and which were available for purchase or were being saved for enlargement of tracts; one 80-acre tract rented to the General Manager; and 108 lots in the village of Palmer. The land and its improvements had a 1948-valuation exceeding \$30,000. 6/

The land on which The Colony began was divided into 208 numbered tracts (Fig. 14). Of these tracts 144 (69%) were of 40 acres and 52 (25%) had 80 acres. On May 23rd, 1935, each colonist was assigned to a tract. Numbered slips of paper were put in a hat and the colonists drew twice, the first time to determine the order of the second drawing and the second time for the number of a tract. After the drawing one month was allowed for exchanges in order that colonists could relocate themselves if they wanted to. At the end of the month, numbered camps were set up at the central points of each cluster of tracts and most of the colonists were moved from Palmer to the camps nearest their tracts. There were 10 camps: eight for the colonists, Camp 1 for the transient laborers, and Camp 3 which was the Community Center at Palmer (Fig. 14). Thus, by July, 1935 the colonists were able to get to their land daily and they were planning to move to the tracts by the end of summer.

A major problem with regard to The Colony's land has been the smallness of the 40-acre tracts. Forty acres is too little land for a dairy farm in Alaska and The Colony was planned to be a dairying community 7/ As quickly as possible the Corporation began enlarging tracts. By 1941, 37 tracts were expanded by the addition of part or all of adjacent tracts. Since then some land has been deeded to colonists and it is difficult to trace enlargements. But, by 1941 erosion was apparent. Land was cleared to the extent that large continuous acreages were unprotected and strong winds began to move the soil westward. Also, it was difficult to enlarge tracts where many were clustered together, particularly south of Palmer, because all tracts were assigned to colonists. At the present time the Corporation is still enlarging original tracts and wind erosion is becoming a serious problem. Plans for new Alaskan settlements should include allowances of land throughout each settlement for expansion of farms. Also, winds are strong throughout the Territory and plans should include stipulations for regional windbreaks, as was partly recommended for The Colony in 1935 8/ but was not done.

6/ Alaska Rural Rehabilitation Corporation, Financial Statements, op. cit., p. 2.

7/ The 40-acre size of tracts was adopted from recommendations made in the early 1930's by M. D. Snodgrass when he was colonization agent for the Alaska Railroad.

8/ A. M. Goodman, Report of Present, and Estimate of Future, Agriculture of the Matanuska Valley of Alaska, 1935, p. 39.

MATANUSKA VALLEY, ALASKA ORIGINAL COLONISTS' TRACTS AND CAMPS

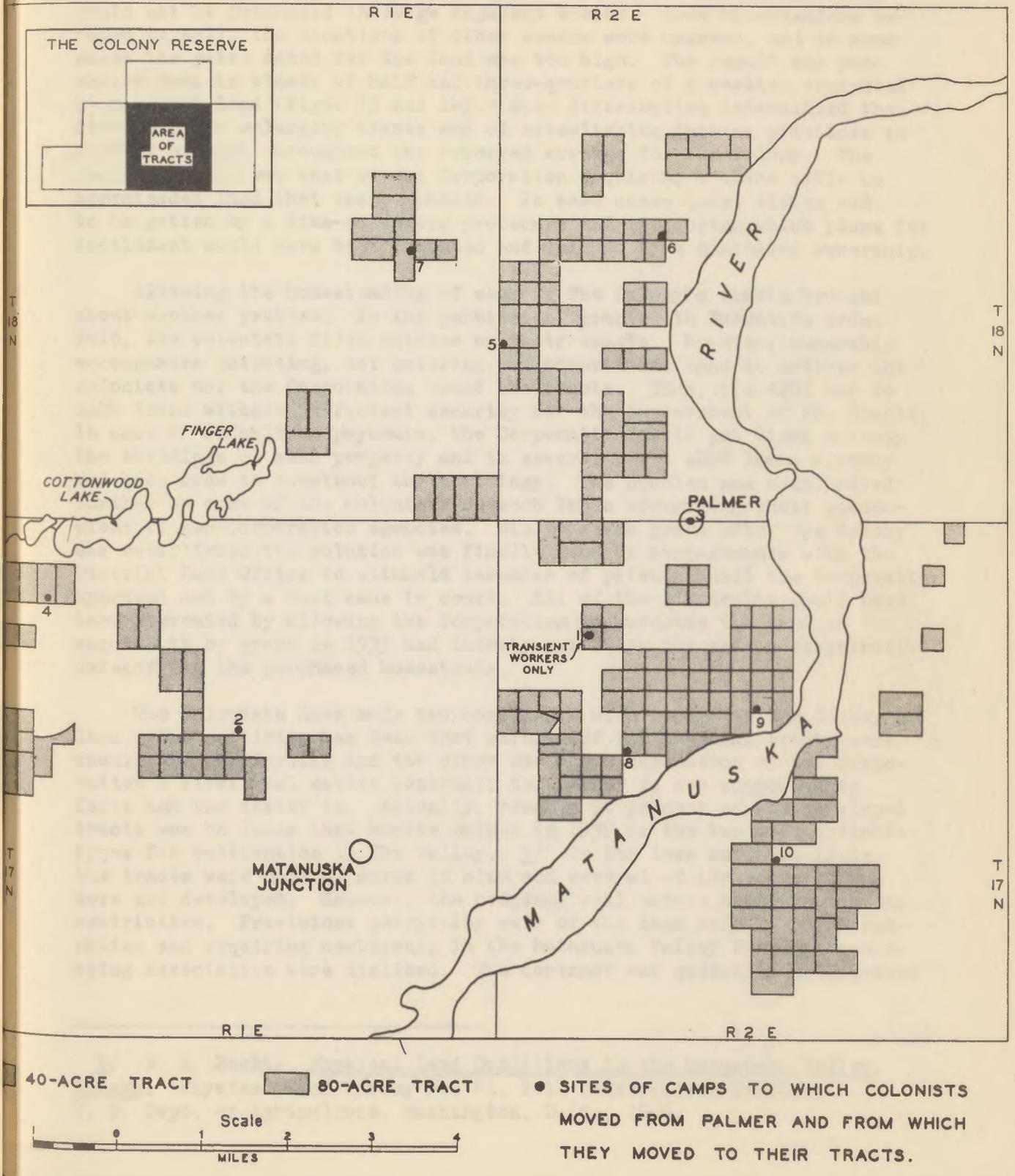
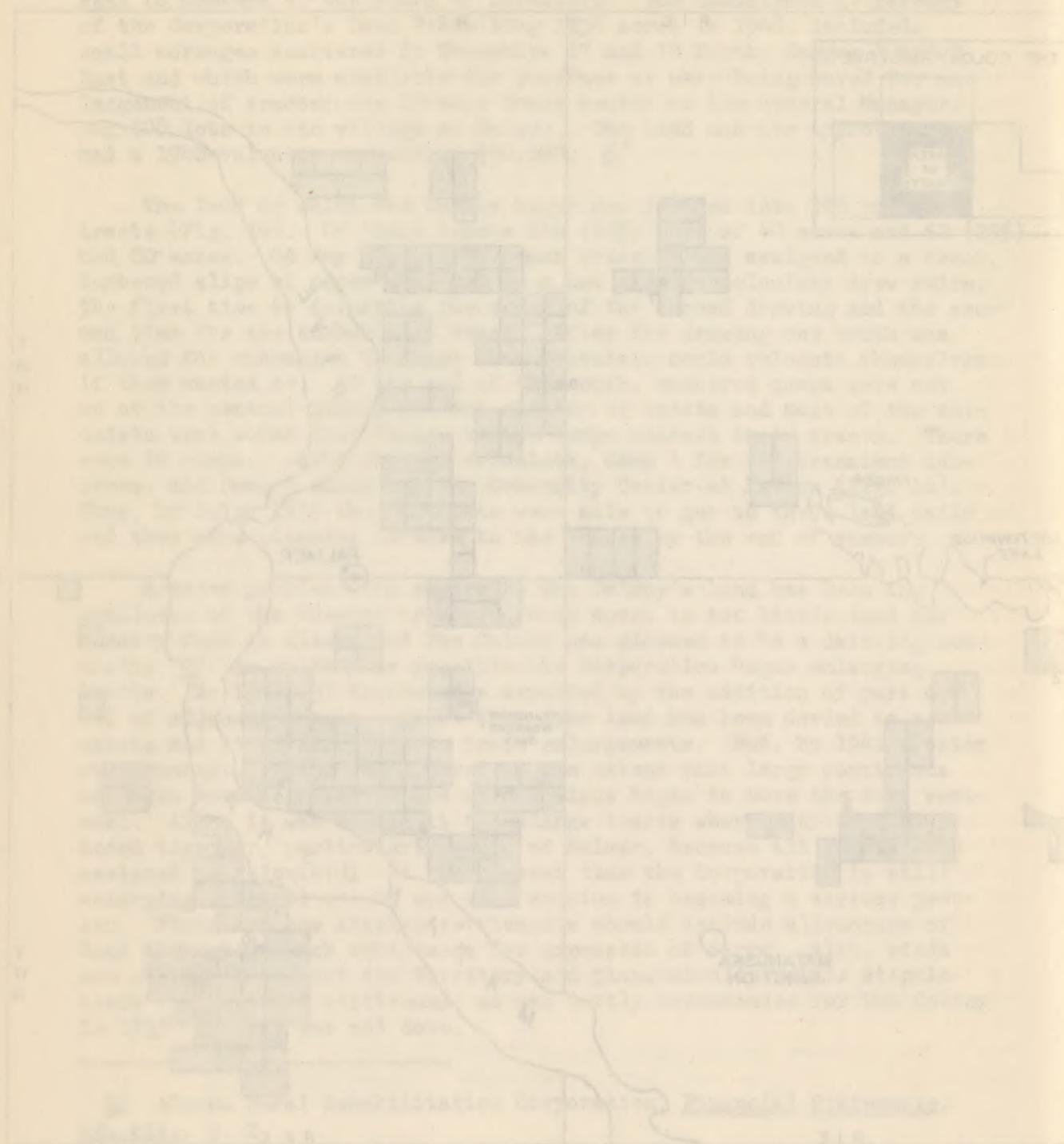


Figure 14

MATANUSKA VALLEY, ALASKA ORIGINAL COLONISTS' TRACTS AND CAMPS



10-ACRE TRACT 50-ACRE TRACT W SITE OF CAMP OF JOHN THOMAS
 TRACTS OR CAMPS ARE INDICATED FROM NUMBER AND TRAIL WHICH
 THEY BELONG TO (SEE LIST)

Figure 14

The purchase of homesteaded land for The Colony introduced two difficulties. These, also, may be anticipated in planning for new settlement. The first problem was that all suitable homesteaded land could not be purchased in large adjacent blocks. Some homesteaders refused to sell, the locations of other owners were unknown, and in some cases the price asked for the land was too high. The result was purchased land in blocks of half and three-quarters of a section separated by patented land (Figs. 13 and 14). Such distribution intensified the difficulty of enlarging tracts and of establishing farming practices to prevent erosion throughout the reserved acreage for The Colony. The second problem was that of the Corporation acquiring a clear title to homesteaded land that was purchased. In some cases quiet titles had to be gotten by a time-consuming procedure and one during which plans for settlement could have been confused and delayed by a contested ownership.

Allowing the homesteading of some of The Colony's tracts brought about another problem. By the permission, granted in Executive Order 7416, the colonists filed entries on their tracts. However, ownership accompanies patenting, not entering, of homesteaded land so neither the colonists nor the Corporation owned the tracts. Thus, the ARRC had to make loans without sufficient security for the improvement of the tracts. In case of default on payments, the Corporation could put liens on only the buildings on such property and in several cases ARRC loans already had been made to construct the buildings. The problem was complicated further by some of the colonists on such lands mortgaging their possessions to non-Corporation agencies. Six to seven years after The Colony was established the solution was finally made by arrangements with the District Land Office to withhold issuance of patents until the Corporation approved and by a test case in court. All of the difficulty could have been prevented by allowing the Corporation to purchase the land or acquire it by grant in 1935 and thereby put it in the same administrative category as the purchased homesteads.

The colonists have made two complaints with regard to The Colony's land. One criticism has been that several of the original tracts were unsuitable for farming and the other was the condemnation of the Corporation's first real estate contract; the former is not supported by facts and the latter is. Actually, roughly 90 percent of the developed tracts was on lands that Rockie mapped in 1939 as the two most suitable types for cultivation in The Valley. ^{2/} On the less suitable lands the tracts were made 80 acres in size and several of the poorer ones were not developed. However, the original real estate contract was too restrictive. Provisions permitting sale of the land only to the Corporation and requiring membership in the Matanuska Valley Farmers Cooperating Association were disliked. The contract was generally interpreted

^{2/} W. A. Rockie, Physical Land Conditions in the Matanuska Valley, Alaska. Physical Land Survey No. 41, Soil Conservation Service, U. S. Dept. of Agriculture, Washington, D. C., 1946.

by the colonists, many of whom were discouraged as early as 1935, as failing to guarantee clear and complete title to the land and as taking away several personal liberties. Subsequent contracts have been improved. The Cooperative Rural Community has not been referred to since 1944 when a new contract was drawn up and provisions in the pre-1944 contracts which are more restrictive than those of the newer contract are not enforced. Too, present-day settlers are given warranty deeds when loans from the ARRC are repaid. In general, it is known that some families, who might have been good colonists, left The Colony because of their dislike for the first real estate contract but no such families are known to have left as a result of their drawing highly unsuitable land.

The experience of procuring and assigning land for The Colony points the way for present planning. A committee in Palmer has summarized the experience in three recommendations. They are: "(1) Determine capability of land through survey by qualified personnel before opening it to settlement. (2) Adjust land allowed for each unit to the particular farming enterprise planned by each colonist by tying the proposed use to the land type. (3) Land opened for colonization would be handled on an outright purchase basis in preference to regular homestead procedure. This would eliminate many difficulties that would otherwise develop in connection with security requirements for loans to colonists." 10/ In The Valley the planners had too little data about the land. The soil study was a reconnaissance only, the availability and location of adequate water supplies were unknown, Rockie's soil survey and L. J. Palmer's grazing inventory 11/ were made in the fifth year of colonization. Had these and other studies been made before The Colony's establishment the problems of size of tracts and suitable farming practices could have been solved early. Preliminary study of the land in the Dunbar area, southwest of Fairbanks, has disclosed warnings that ice pitting may develop if the land is cleared and that the presence of enough potable water is questionable. In the area reserved near Kenai, southwest of Anchorage, the land appears to be suitable for farming but how deep wells would have to be is unknown. About these two areas planners should know, also, what the pattern is of land suitable for cultivation and where the patented and entered lands are. And, a more important question is: what are the qualities of the land in the other Alaskan areas suitable for group settlement? The land is the foundation for farming; the Territory's best land, with respect to location and suitability for farming, must be found. Then we consider the settlers.

10/ C. W. Peters, letter to Chairman of Matanuska Valley Agriculture Committee, Palmer, Alaska, November 12, 1948, pp. 1 and 2.

11/ L. J. Palmer, Matanuska-Susitna Valley Range and Wildlife Survey, Biological Survey, U. S. Dept. of the Interior, (Juneau, Alaska?), 1939.

Chapter 5

SETTLERS FOR THE COLONY

On The Colony's land were placed 202 families. Eight hundred and ninety-five people were selected from disadvantaged families in Michigan, Minnesota, and Wisconsin, and were moved to the Matanuska Valley by train and boat. A family of eight went from Oklahoma. Until about 1940, new settlers who were replacing original colonists also were selected. By 1948 one-third of the original colonists were still living in The Valley as well as nearly half of the selected replacements. Few of these people are full-time farmers. Certainly the number of original colonists staying in the area and farming would have been higher if there had been enough time to carefully plan and execute the selection of colonists. In general, analysis of the selection reveals more negative than positive guides for present planning because the process was restricted as is now unnecessary, it was hurried as is usually inadvisable, and, it was carried out by administrators generally lacking Alaskan experience as is also unnecessary at the present time.

Relief workers chose the original colonists. The responsibility of selection, originally to be Mr. Irwin's, was delegated to the Divisions of Social Service in the Emergency Relief Administrations of Michigan, Minnesota, and Wisconsin. The qualifications for selection were decided on in Washington in March, 1935. All of the selecting was done in the following five or six weeks by case workers. The general consensus of colonists' opinions is that the colonists were not misled by the selectors but that the case workers were unfamiliar with Alaskan problems. In a few counties, local administrators may have "dumped" more difficult cases into The Colony but this procedure is judged to be the exception rather than the rule. In other instances, families that the relief workers judged to have questionable adaptability were sent because there were quotas to be filled. However, the basic criticism of the selective process was the requirement of speed. This is substantiated by the statement of one supervisor: "The selection has been made hurriedly and will undoubtedly aggravate some of the adjustment problems." 1/

1/ Alaska Rural Rehabilitation Corporation, File No. 100, op. cit., memorandum dated March 15, 1935.

Five bases were to be used in picking original colonists. These were:

- "1. Only 'honest to God' farmers.
- "2. Only couples between the ages of 25 and 35, unless a special case under 25 or over 35 shows a special qualification.
- "3. The couples selected must be physically strong and mentally ambitious and be possessed of a rugged, pioneering spirit. No particular attention should be paid to group or related families, or racial or religious factors, excepting that the group should be basically of the Nordic type and fitted by living habits to adjust to the Alaska environment. The entire group must be selected on a basis to cooperate in a commercial enterprise.
- "4. An average size family rather than too large a family should be given consideration.
- "5. As far as possible families should be selected first on their farming ability and secondly, those who may have secondary skill and who may adjust themselves to a diversified farming activity and can assist with carpentry on their homes and then those who may know something of machinery and blacksmithing and who have leadership qualities." 2/

The relationships of these instructions to the actual selection are discussed below.

The original colonists were picked in the northern Great Lakes states. That area was felt by the planners to have climatic and farming conditions essentially similar to those in The Valley. About 75 percent of the colonists were chosen from northeastern Minnesota and the northern parts of Wisconsin and Michigan (Fig. 15). These parts of the states are in the Cut-Over region where, at the time of colonization, the percentage of persons on relief was nearly the highest in the United States. The remaining colonists lived adjacent to the Cut-Over Region and one family originated in Oklahoma.

2/ Alaska Rural Rehabilitation Corporation, File No. 100, op. cit., memorandum dated March 13, 1935.

UNITED STATES' HOMES OF ORIGINAL MATANUSKA VALLEY COLONISTS

• LOCATION, BY COUNTY, OF
HOME OF ONE FAMILY.
(HOME OF FAMILY FROM ELLIS
COUNTY, OKLAHOMA NOT SHOWN).

--- SOUTHERN LIMIT OF
LAKE STATES CUT-OVER
REGION (AFTER U.S. BUR. OF
AGRI. ECONS., 1940).

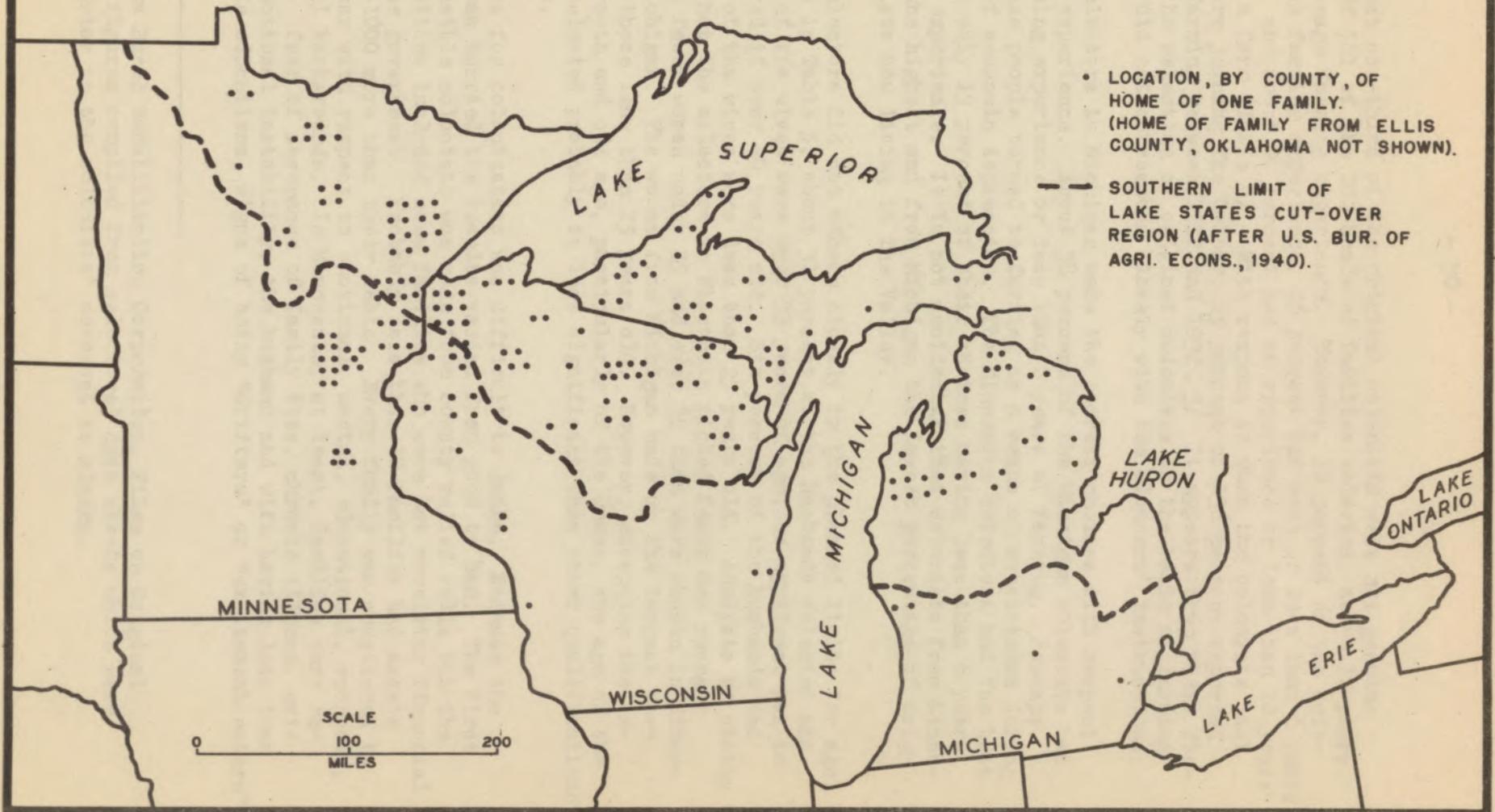


Figure 15.

At least one-third of the original colonists were not genuine farmers. Of 181 of the 202 heads of families selected, about 12 years was the average farming experience. However, 10 percent of the colonists had no farming experience, 26 percent had none or less than 6 years' experience, and about 40 percent had no experience or less than 10 years of life on a farm (Table 4). With respect to when the colonists last farmed before joining The Colony, 25 percent of 136 persons reported on ceased farming between 1912 and 1932. ^{3/} It appears from these figures that the selection of original colonists on the basis of farming experience did not correspond closely with the planners' instructions.

The selectors in Michigan made the poorest choices with respect to farming experience. About 38 percent of the Michigan colonists had had no farming experience or less than 6 years of farming. Perhaps many of these people turned to farming as a means of subsistence during the years of economic depression. The Minnesota selectors had the best record with only 13 percent of their choices having less than 6 years of farming experience. It is not accidental that colonists from Minnesota have the highest and from Michigan the lowest percentage of original colonists now living in The Valley.

The selectors did not adhere closely to the planned limits for age. As is shown in Table 5, about 31 percent of the husbands selected and 13 percent of the wives were over 35 years of age; no applicant was to be considered if over 40 years old. Six percent of the husbands and 32 percent of the wives were less than 25 years old. Analysis by states discloses that the selectors in Wisconsin picked fewer men younger than 25 and fewer women under 25 and over 35 than were chosen in Minnesota and Michigan. The women from Michigan made up the largest percentage of those less than 25 years old. However, excepting the extremes of youth and old age, particularly of the women, the age of the colonists selected probably is less significant than other qualifications of settlers.

Fitness for colonization was difficult to judge. Because the selection was hurried the results varied from good to bad. The first list of possible colonists was made from county relief rolls but the final selections included some families who were not receiving financial aid from the government. Probably less than 10 families had assets worth \$800-1000 more than their debts. Every family was considered by a case worker with respect to emotional, mental, educational, economic, and physical backgrounds. In Minnesota, at least, families were rejected for: fear of severance of family ties, chronic illness, evidence of emotional instability, the husband and wife having less than eighth-grade educations, signs of being "drifters" or "excitement eaters",

^{3/} Alaska Rural Rehabilitation Corporation, Files on Original Colonists; figures compiled from selectors' data sheets which were filled in prior to the colonists' movement to Alaska.

Table 4.--Original Colonists, Years of Farming Experience*

Years' Exper.	No. of Colonists	Years' Exper.	No. of Colonists	Years' Exper.	No. of Colonists
0	18	11	1	23	2
2	11	12	4	24	2
3	6	13	5	25	6
4	2	14	2	26	1
5	8	15	17	27	2
Some	2	16	8	28	3
6	8	17	3	30	3
7	4	18	4	31	1
8	10	19	1	32	1
9	3	20	8	34	1
10	29	21	1	37	2
Several	1	22	1	Not Reported	22**

*Alaska Rural Rehabilitation Corporation, Files on Original Colonists'; figures compiled from selectors' data sheets which were filled in prior to the colonists' movement to Alaska.

**Includes the one family of original colonists whose home was in Oklahoma.

being poor economic managers, and for lacking a strong desire to resettle in Alaska. Each family had to pass medical tests. However, mistakes were made. A man with a wooden leg was approved because he had a son who could help farm, three tubercular men were accepted, and some persons lacking adaptability or with chronic illnesses were selected. In general, it appears that the measurement of the fitness of the colonists was weak. If it is ever desirable for new settlements to be peopled as The Colony was, sufficient time and personnel should be allotted for rather complete physical and psychiatric testing of each applicant.

The selectors generally followed directions as to family size. In 1930 the United States' average was four persons per family and the original colonists' families averaged four to five people. About the same number of families by size was picked in each of the three states; the sizes ranged from two to nine people and one family of 13. More sociological research is necessary to determine whether any relation exists between the size of a colonist's family and the ability of the family to remain in an Alaskan settlement.

Table 5.--Original Colonists, Age of Husbands and Wives in 1935*

Age	No. of Husbands	No. of Wives	Age	No. of Husbands	No. of Wives
47	1	0	29	8	13
46	1	1	28	10	17
45	3	0	27	8	10
44	3	0	26	12	9
43	2	1	25	7	6
42	4	0	24	4	11
41	7	2	23	5	10
40	13	3	22	0	16
39	3	6	21	3	7
38	7	1	20	0	7
37	7	9	19	0	3
36	10	3**	18	0	6
35	13	9	17	0	2
34	16	8	16	0	1
33	12	5	Not Reported	5	5
32	8	9	Over 35	61	26
31	11	10	Under 25	12	63
30	18	9			

*Alaska Rural Rehabilitation Corporation, Files on Original Colonists; figures compiled from selectors' data sheets which were filled in prior to the colonists' movement to Alaska.

**The couple from Oklahoma is not included.

Skills secondary to farming were important in selection of original colonists. Here the selectors obtained wide variety of experience. Original colonists were skilled in 103 occupations, some of which are listed in Table 6. Although these aptitudes were to be secondary to farming, several colonists with little or no farming experience were picked for their non-farming abilities. This procedure appears to be quite logical for proposed settlement if the people may be employed in their trades at the time of settlement. However, to compel tradesmen to farm until their professional services are required is to invite disharmony at the start of settlement.

Each colonist signed a Settlement Agreement after selection. The Agreement, between the ARRC and a colonist, provided the conditions under which colonization began. The provisions were for: transportation to Alaska at the expense of the state of origin; the setting up of a

Table 6.- Original Colonists, Number by Experience in Selected Occupations other than Farming*

Occupation	No. of Colonists	Occupation	No. of Colonists
Blacksmith	9	Mechanic	18
Bricklayer	7	Millwright	2
Butcher	1	Nurse	2
Cabinet Worker	7	Painter	8
Carpenter	55	Plumber	3
Concrete Worker	3	Plasterer	1
Cook	4	Road Constructor	4
Driller	1	Saw Mill Operator	4
Electrician	5	Steam Shovel Operator	3
Engineer	2	Stenographer	3
Fireman	4	Surveyor	1
Forester	2	Teacher	10
Foundry Worker	2	Telephone Operator	1
Grocer	1	Tractor Driver	13
Ice Cutter	1	Truck Driver	29
Leather Worker	4	Weaver	1
Logger	17	Welder	4

*Includes male and female colonists. In several cases one person is listed as having experience in more than one occupation.

temporary camp by the Corporation at Palmer; the ARRC to make available a farm home, not less than 40 acres of land, and funds for improvement which were to be repaid on an amortized plan extending over 30 years; the Corporation to furnish farm machinery and equipment for which payment was to be agreed upon; the ARRC to supply subsistence at actual cost until the colonist was self-supporting; and, the Corporation to build and equip the necessary cultural, recreational, health work, and business centers in the community. Also, it was established that interest rates would be not more than three percent, that interest would begin in September 1938, and that payment of installments would start in September 1940. The Settlement Agreement is perfectly clear when read carefully. However, future agreements of this type might be prepared with common words and in ordinary prose -- even though such wording is difficult in legal documents -- to prevent misunderstandings such as were common among original Matanuskan colonists.

The colonists were moved in April and May of 1935. In each state there were concentration points and from them the people went by train to Seattle or San Francisco. They were feted all along the way. From the ports movement to Seward was by an Army transport, the St. Mihiel, and a boat belonging to the Office of Indian Affairs, the North Star. At Seward, the colonists transferred to the Alaska Railroad and went the remaining 150 miles northward to Palmer.

Moving the colonists possibly cost about \$70,000. Exact figures cannot be obtained. It is known that \$18,436 was paid by the colonists' home states for transportation to the west coast. 4/ The Corporation's expense for chartering the St. Mihiel was \$60,000 5/ and for the North Star was approximately \$10,000; 6/ however, each ship was used to haul equipment and supplies as well as colonists and possibly half of the expenses are chargeable to general organization of The Colony. What the ARRC paid the Alaska Railroad is not obtainable but it is estimated that shipment of the colonists and their effects cost about \$12,500. 7/ Originally these costs of transportation were to be paid by Michigan, Minnesota, and Wisconsin with funds from the F. E. R. A. However, the records indicate that the Corporation assumed all of the expenses of the colonists after they reached the west coast. Although the funds for colonization eventually came from the same source, the Corporation's assumption cost probably \$50,000 that were not budgeted in the plans for The Colony.

Some of the colonists began to plan to leave upon arrival in The Valley. Confusion reigned. By July 1935, after less than two months of living in The Colony, the departures began (Table 7). By March 1939, 537 persons had left but half as many arrivals and more births than deaths kept the total population over 700 colonists. 8/ The reasons given for leaving reflect to some extent weaknesses in the selective process. At least 26 families left because of ill health, 24 because they were not suited or were asked to leave, and 47 because they were dissatisfied. These figures show that no less than a fourth of the original colonists were unsuited physically or mentally for colonization.

4/ J. P. Crimmons, op. cit., Summary, pp. 9-10.

5/ Obtained from O. F. Ohlson, who had charge of transportation of the colonists, in an interview on August 9th, 1948.

6/ Alaska Rural Rehabilitation Corporation, General Ledger for 1935, mss.

7/ Computed from passenger and freight rates quoted for 1935.

J. P. Triber, Letter to K. H. Stone, Anchorage, Alaska, October 22, 1948.

8/ Summarized from J. P. Crimmons, op. cit., Part XII, p. 1.

Table 7.--Population Changes in the Matanuska Valley Colony, May 1935 to April 1939*

Month and Year	:Fami- lies :Arriv- ing	: Total Persons : Arriv- ing	: Fami- lies : Depart- ing	: Total Persons : Depart- ing	: Births :	: Deaths :	: Total Fami- lies Present : at End of Month	: Total Persons Present at End : of Month
May, 1935	202	903	--	--	1	--	202	904
June	--	--	--	--	1	2	202	903
July	1	5	26	101	3	2	177	808
August	--	--	5	22	4	2	172	788
Sept.	--	--	1	7	7	--	171	788
Oct.	--	--	2	5	4	--	169	787
Nov.	--	--	4	14	4	--	165	777
Dec. 1935	--	--	1	2	2	2	164	775
Jan. 1936	--	--	7	34	3	--	157	744
Feb.	10	40	4	16	1	--	163	769
March	--	--	1	5	2	--	162	766
April	--	--	6	29	2	1	156	738
May, 1936	--	--	3	7	2	--	153	733
June	1	3	4	14	7	--	150	729
July	--	--	3	14	4	--	147	719
August	3	12	--	--	5	--	150	736
Sept.	8	33	--	--	6	--	158	775
Oct.	5	16	--	--	6	--	163	797
Nov.	--	--	--	--	5	--	163	802
Dec. 1936	1	6	--	--	3	--	164	811
Jan. 1937	--	--	2	11	5	1	162	804
Feb.	2	11	--	--	3	--	164	818
March	7	23	3	10	5	--	168	836
April	2	6	4	14	4	1	166	831
May	2	9	3	16	2	--	165	826
June	2	10	1	7	4	--	166	833
July	3	21	2	9	2	1	167	846
Aug.	2	4	1	4	1	--	168	847
Sept.	1	8	1	4	7	--	168	858

*Summarized from J. P. Crimmons, op. cit., Part XII, p. 1

Table 7 (Continued)

Month and Year	: Fami- : lies : Arriv- : ing	: Total : Persons : Arriv- : ing	: Fami- : lies : Depart- : ing	: Total : Persons : Depart- : ing	: Births : : :	: Deaths : : :	: Total Fami- : lies Present : at End of : Month	: Total Persons : Present at End : of Month
Oct.	1	2	--	--	1	--	169	861
Nov.	2	3	1	2	--	--	170	862
Dec. 1937	--	--	--	--	3	1	170	864
Jan. 1938	--	--	2	9	1	--	168	856
Feb.	--	--	2	11	3	--	166	848
March	1	3	2	3	2	--	165	850
April	1	3	1	5	2	--	165	850
May	1	3	3	13	9	--	163	849
June	2	12	7	37	3	--	158	827
July	1	4	--	--	2	--	159	833
Aug.	1	4	--	--	5	--	160	842
Sept.	1	3	5	21	4	1	156	827
Oct.	--	--	6	31	--	1	150	795
Nov.	1	2	4	24	1	--	147	774
Dec. 1938	1	3	5	20	1	1	143	757
Jan. 1939	3	8	1	11	3	--	145	757
Feb.	3	11	--	--	1	--	148	769
Mar. 1939	--	--	1	5	4	1	147	767
	271	1171	124	537	150	17		

Probably part of those dissatisfied also were not suited but many of them left because of rigid administrative controls and criticism of those colonists is questionable.

All of the original colonists who left The Valley were encouraged to return to their homes in the States. Some did but a few located in the Pacific Northwest. More than half of the families are living in places unknown to persons now in The Valley or to the personnel of Alaskan post offices. At least 37 families remained in the Territory and 31 went to the Anchorage area from The Valley. The low percentage of those persons contacted prevents generalizations; few are now farming and very few feel that they improved their financial status by leaving The Colony.

All of the replacement colonists were selected until about 1940. Approximately 80 families were chosen in these six years. Selection was by the ARRC administrators. Persons desiring to join The Colony applied by filling in a form. Personal and financial references were interrogated, often personally, and selection was then made. Emphasis was placed on the applicants' farming experience, financial responsibility, and cooperative attitude. About 35 percent of the replacements lived in Alaska at the time of application and a fourth were in the three west coast states and Montana. The rest were in 11 other states scattered about and west of Ohio.

About 43 percent of the selected replacements, or 34 families, were still in The Valley in 1948. The remainder were as difficult to locate as the original colonists who left The Colony although 14 selected replacements are known to have gone to other places in the Territory when they left.

In general, the selection of replacements was better than that of original colonists. The selectors of replacements were not hurried, they had Alaskan and colonization experience, and they personally interviewed a third of the people accepted; a large proportion of the replacements had funds with which to get started; and some of the confusion in starting The Colony had been eliminated by the time replacements went to The Valley. Therefore, it is not surprising that 43 percent of the replacements stayed in The Colony compared with 31 percent of the original colonists.

At the end of 1948, 63 families, about a third, of the original colonists still lived in The Valley (Table 8). While the average farming experience of these families in 1935 was $15\frac{1}{2}$ years and 35 have remained on their original tracts, only about 12 families have made all or most of their living from farming. Husbands and wives who were less than 25 years old in 1935 made up the lowest percentages, by age groups, of those in The Valley in 1948. In original family size those of two

Table 8.--Number of Original Colonists' Families in Matanuska Valley, December, 1948

	<u>Michigan</u>	<u>Minne- sota</u>	<u>Wisconsin</u>	<u>Total</u>
No. of Families, 1935	67	66	68	201
No. of Families, 1948	15	25	23	63
Percent of Families in 1935 There in 1948	22	38	34	31

persons in 1935, the younger colonists, also represented a low percentage; otherwise, original family sizes up to 10 persons had about the same percentage relationships to total families in 1948 as in 1935. ^{9/} Additional research is necessary to determine if the fitness of the families who stayed in The Colony was significantly higher than that of the colonists who left.

When the colonists went to The Valley, 117 families were already there. These people had homesteaded in the eastern half of the area in two small waves of settlement. One wave was during and after the construction of the Alaska Railroad through The Valley in 1916 and the other was between 1929 and 1935 when the Railroad sponsored homesteading in the area. Some of the homesteaders were friendly with the colonists, others termed them "red plush pioneers". As the western portions of the reserve for the Colony have been opened up for homesteading, described in Chapter 4, an undetermined number of new settlers have taken up land. In 1948 the homesteaders were centered on the village of Wasilla and were slowly spreading northward from the village and southwestward along the road to the ruins of Knik Village. Also in 1948, there were living in The Valley 75 homesteaders who settled in the area prior to 1935. ^{10/} Pre- and postcolonization homesteaders have become members of the Matanuska Valley Farmers Cooperating Association or have obtained aid from the Corporation. Thus, although the western part of The Valley has been largely homesteaded and the eastern part colonized, the two types of settlers have merged into a common settlement which was estimated, by residents, to have from 2500-3000 people in 1948.

^{9/} The very low percentage ($6\frac{1}{2}$) of families of five remaining in The Valley is believed to be insignificant.

^{10/} Compiled in part from lists prepared by M. D. Snodgrass, early homesteader in The Valley.

In the process of choosing settlers, success ultimately rests upon the judgment of the selectors. Some characteristics of the prospective settlers may be measured objectively. However, a basic personal quality is adaptability which, for the most part, has been judged subjectively. How accurately the Matanuskan colonists' abilities to make the necessary adjustments were measured requires more analysis but it appears to have been done rather poorly. For future agricultural group settlement the following qualifications might be considered as the ideal combination of experience and assets: that they have a minimum of 5-10 years, and preferably 10-15 years, of farming experience which ended no more than five years prior to the date of Alaskan settlement; that, if feasible, they be interviewed by persons with Alaskan experience; that they go to Alaska mostly by choice and little from economic necessity; that they have enough money to pay for their transportation, part of their land or all of their chattels, and at least the first year's subsistence; that the husbands, and possibly the wives in particular, be from 30 to 40 years old and in good physical and mental health; and, that they have sufficient experience in a profession other than farming to use it as a secondary source of income if necessary. 11/ To these suggestions, a committee in Palmer would add three: give preference to veterans or persons with funds to invest and who are in the Territory, have 75 percent of a settlement's population American citizens, and gear the rate of settlement to the present and prospective markets for the output of Alaskan farms in order to sponsor normal development. 12/ These additional suggestions have much merit. Then, when qualities and quantities of settlers are known, as well as those of the land and the administrators, consideration may be given to funds needed for settlement.

11/ Other suggestions have been made in: H. F. Infield and E. Dichter, Who Is Fit For Cooperative Farming?, Applied Anthropology, January-March, 1933, p. 10 and C. P. Loomis, op. cit., pp. 397 and 408.

12/ C. W. Peters, op. cit., pp. 1 and 2.

Chapter 6

FINANCING THE COLONY

About \$5,400,000 were granted for the colonization of the Matanuska Valley. These funds were Federal money and the sum was nearly five times the planners' estimate. Approximately 80 percent of the grants were to the ARRC and the remaining 20 percent to cooperating agencies in the United States and Alaska. Surely unwise expenses were great, a natural result of hurried planning and settlement. However, at least 40 percent of the grants and a growing community still are credits in The Valley. In addition, planners have gained data for financing proposed group settlement even though some of the data must be used with caution.

The planners' estimated cost of colonization was \$1,093,365. This amount included grants to be made to the ARRC and to Emergency Relief Administrations in the States. The funds were budgeted for: administrative expenses in Washington, D. C., and in Palmer during the period of construction; the purchase of household effects for colonists' families; buying land, equipment, supplies, food, and cattle; transportation; the construction of buildings on farms and in the Community Center; the improvement of farms; and operating capital. ^{1/} However, the planners' budget did not include such items as the construction and improvement of roads in The Valley and some of the expenses were not to be charged directly to the Corporation but, rather, to the F. E. R. A. in Washington. The tabulations of expenses that follow are as inclusive as possible for the whole project, whether or not costs were charged to the ARRC in Federal accounts.

Known grants for The Colony total \$5,407,689. This sum was allotted by the F. E. R. A. in Washington to the ARRC and cooperating agencies (Table 9). The Corporation was granted \$3,930,718 ^{2/} directly, appropriated in 12 grants made between May 1935 and October 1938. Since 1938 no grants have been made to the ARRC from any source. There were five indirect grants to the Corporation. Three were to the California E. R. A., which acted before the ARRC was formed, and

^{1/} Alaska Rural Rehabilitation Corporation, File No. 100, op. cit., Summary of Estimated Expenditures of the Matanuska Valley Project as of May 22, 1935.

^{2/} From the work sheets for: Alaska Rural Rehabilitation Corporation, Financial Statements, op. cit.

Table 9.--F.E.R.A. Grants for the Matanuska Valley Colony

To	Date	For	Sum
ARRC	1935-38	General Colonization	\$3,930,718.68 ^{2/}
Calif. E.R.A.	1935-36	General Colonization	716,907.36 ^{2/}
Mont. E.R.A.	1935	Cows and Horses	19,782.67 ^{2/}
Wyo. E.R.A.	1935	Horses	<u>14,447.84</u> ^{2/}
Sub-Total Accounted as Grants to ARRC			4,681,856.55 ^{2/}
Mich. E.R.A.	1935	Colonists' Expenses	26,823.51 ^{3/}
Minn. E.R.A.	1935	Colonists' Expenses	30,347.66 ^{3/}
Wis. E.R.A.	1935	Colonists' Expenses	20,195.49 ^{3/}
Al. Road Comm.	1935-36	Road Constr. & Imp'v'm't.	<u>648,466.00</u> ^{4/}
Total Granted For Colonization			\$5,407,689.21

the other two were to the E. R. A.'s of Montana and Wyoming (Table 9). The funds allotted indirectly totaled \$751,137.

Other known grants for colonization were \$725,832. Of this \$77,366 went to the home states of the colonists. ^{3/} The funds were used for the colonists': clothing, household equipment, medical and dental care, transportation to the west coast, subsistence, and incidental expenses. The other \$648,466 were used by the Alaska Road Commission ^{4/} and were not, as far as is known, budgeted for by The Colony's planners.

Analysis of the expenses of colonization is difficult. It is unknown what the costs were to cooperating agencies for fire control services and for the post-1935 inventories of the soils, grazing lands, and colonists' finances. Such costs should have been budgeted in planning for settlement. Also, the Corporation's accounting systems were complex and varied. Six or seven different systems of accounting were employed and the balance of an account often was not comparable after a change in systems. Records were poorly maintained for the years 1936-1938 and 1940-1942. ^{5/} Purchases made from California were difficult to keep track of in Alaska. The ARRC's accounts were not set up

^{2/} From the work sheets for: Alaska Rural Rehabilitation Corporation, Financial Statements, op. cit.

^{3/} J. P. Crimmons, op. cit., Summary, pp. 9 and 10.

^{4/} I. P. Taylor, Letter to K. H. Stone, Juneau, Alaska, August 2, 1948, p. 1.

^{5/} The details of inadequate accounting are described in: W. W. Head, op. cit., v. One, p. 10.

topically in order that the total cost of items, such as, buildings and facilities for marketing, could be computed; valuations of such items were determined by appraisal in 1936. If annual audits were made, as required by the Corporation's Articles of Incorporation, none was recorded until the first complete audit made in 1938 and the second in 1942. Also, between audits there are major discrepancies. For example, Warehouse No. 1 was completely destroyed by fire on April 27th, 1936. The loss was inventoried the following day as \$12,107.08 ^{6/} and was so recorded in the 1938 audit; yet, four years later the loss was re-audited as \$313,268.85, ^{7/} reportedly because the accountants could not trace certain expenses which were eventually put in the fire account. Such instances led to charges of graft but the accusations are not repeated here because they were not disclosed in the audits of 1938, 1942, or those made annually since 1942.

Financing the settlers was complex and costly. Most of the colonists interrogated feel strongly that this phase of colonization was the most important and the most poorly managed. When the colonists signed the Settlement Agreement they were told that their debt to the Corporation would be about \$3500 or less. Instead, many debts approximated \$10,000 after two years of settlement and several were between \$10,000 and \$18,000. The result of high debts was discouragement for the colonists and at least half of those that left did so because they owed so much and felt that they would just get more in debt by staying in The Colony. The blame for the high debt was partly the Corporation's and partly the colonists'. However, a fundamental cause was the hurried nature of the colonization and the significant point is the necessity of preventing a repetition of settlement in which haste, and therefore waste, is the rule.

What caused the high debts? Selected significant reasons, which are analyzed briefly, were: the high cost and reported inefficiency of non-colonist labor, the slow clearing of land, low quality livestock, poor economic management by some colonists, and the fact that the colonists handled too little money at first.

Non-colonist labor was expensive, both in dollars and colonists' morale. Transient workers were paid a dollar a day and were given their food, lodging, and clothes ^{8/} while colonists were allowed 50 cents an hour and their earnings were applied on their debts for subsistence. Many instances have been cited, by colonists who were skilled tradesmen, in which unacceptable labor was performed by transient workers in the construction of buildings and had to be redone by the colonists. Others reported that they were prohibited taking part in certain construction

^{6/} Alaska Rural Rehabilitation Corporation, Journal Voucher, mss., entry for December 31, 1936.

^{7/} W. W. Head, op. cit., v. Two, p. 47.

^{8/} Only two to four dollars a month was paid in cash to the transient workers while in Alaska. The balance was paid to the workers when they returned to California.

work, even though the colonists were skilled in the work and the transients not. At least two administrators, as well, have stated that these criticisms are justified.

The colonization plan was made with the assumption that each farm would have 12 acres of land cleared in the first year. The total cost of colonization to a colonist by the end of the first year was to be \$3512.50. ^{9/} This included the costs of the farm, seed, and railroad and boat fare but excluded \$455-worth of subsistence which was to be assumed by the Corporation. Each colonist was expected to reach self-sufficiency by farming after the first year and to be able to make payments on debts after the fourth year. However, the first year's expenses were underestimated, the colonists were charged for the first year's subsistence (in accordance with a provision in the Settlement Agreement), and so much time was spent on the construction of farm buildings in 1935 clearing was hardly started. Actually, the cleared land did not average 12 acres per tract until the summer of 1938. Thus, if 12 acres was the minimum amount of cleared land for self-sufficiency, the colonists' debts had to increase during the first years on the basis of subsistence alone.

Some debts were forced higher by the colonists' cattle. The animals were of poor quality. As one administrator pointed out, "Due to the haste of the emergency situation some poor buys were made for the Corporation in the States of quite a number of Chattels brought to Alaska and turned over to the Colonists. This has proven to be particularly true with some of the horses which are found to be underweight in size and not up to representations and some of the cows brought as good milch cows are turning out to be poor producers and are only 'borders' which should be butchered and the expense of feeding stopped." ^{10/} The animals arrived in the summer of 1935. Barns were not built, cleared land was not ready for pasturage, and hay for six to seven months per year of barn-feeding was \$60-65 a ton. Some colonists knew they were not prepared for the cattle but took the animals when advised that it was unlikely that more would be obtainable later. The result was a high cost of upkeep and low return per animal.

It is certain that some colonists were poor managers. Specific families are known to have gotten equipment and food in excessive amounts. It is true that prices of articles in the trading post were not marked on the goods in the first months of colonization, because the prices paid by the California E. R. A. were unknown in Palmer. Also, claims have been made that the colonists could not find out what their individual debts were during the first two years and that all family budgeting

^{9/} M. Callister, Memorandum on Washington Conference on Alaska Rural Rehabilitation Project to State E. R. A. of Minnesota, March 13, 1935.

^{10/} H. M. Colvin, letter to L. B. Jacobs, Palmer, Alaska, Sept. 11, 1937, p. 4.

was done in the Corporation's office with a theoretical formula. A common suggestion from the colonists has been that they should have been credited an amount, as though they received a loan from a bank, and that they should have then been allowed to manage their own financial affairs. For those families who sincerely tried to keep their debts low, and there were many, the suggestion has merit.

In 1935 and 1936, the colonists were forced to deal too much with substitutes for money. "Chits" were signed for articles obtained at the trading post, notes were signed for credits to colonists' accounts, and half of a colonist's pay for labor or a sale was credited to his account. Also, artificial money, called bingles, was used. These bingles were the form of currency in use between March 1st, 1936 and January 31st, 1937. Each family was allotted so many dollars worth every month for purchase of goods at the trading post. By the adoption of the credit systems and the bingles the colonists were being encouraged to reduce their debts. However, the people reacted bitterly to the systems and it is suggested that the use of regular money encourages the development of financial responsibility faster than the use of substitutes.

All debts were reduced by a Debt Settlement Program in late 1937. This program was a complex means by which the Corporation assumed a portion of each colonist's debt. From the beginning of The Colony, it was felt that governmental funds should be used for part of the expenses and that the costs should be borne in a manner which encouraged the colonists who were frugal. 11/ Accordingly, the ARRC Board of Directors resolved in 1937 that the following deductions would be made, as of January 31st, 1937: all dental, doctor, and hospital charges; a feed allowance of \$250 per colonist; all well charges in excess of \$25; \$500 per colonist for materials used in buildings, the values of which were determined, not from accounts, but by appraisal in 1936; clothing charges for initial purchase; subsistence and clothing allowances between June 1st, 1935 and January 31st, 1937, computed on the basis of the budget schedule in effect on December 31st, 1936; labor for work performed on buildings by colonists; and credit for land cleared by colonists. Also, it was decided that all debts over \$8000 would be further reduced. 12/

The total cost of debt settlement was \$1,137,560 (Table 10). Charges have been made that the original formula for adjustment was not applied and that those persons with the greater debts were favored. The former charge has been made by a certified public accountant (note second item in Table 10) and it is true that those persons with the higher debts received greater adjustments than those with the lower debts in order to get all accounts to less than \$8000. However, it is more significant for this

11/ H. M. Colvin, letter to L. B. Jacobs, Palmer, Alaska, Sept. 11, 1937, p. 1.

12/ Alaska Rural Rehabilitation Corporation, Minutes of the Meeting of the Board of Directors held in Palmer, Alaska, on April 23 and 24, 1937.

Table 10.--Cost of Matanuska Colony Debt Adjustment Program 13/

<u>Item</u>	<u>Sum</u>
Direct Debt Adjustment Allowances	\$ 819,764.44
Proportionate Credit to Bring Adjusted Debt into Accord with General Average of Debt Adjustment	95,635.82
Blanket Reduction of 20 percent After Above Allowances	195,375.05
Loss on Land Sold to Colonists; Difference Between Actual Cost and Sales Price at \$1.25 Per Acre	<u>26,785.30</u>
Total,	\$1,137,560.61

study to note that costs were included in the adjustments for items underestimated in the planning, for examples, the cost of wells and the 1936 and 1937 loans for seed. These inclusions made it unfeasible to attempt computation of costs of colonization by some topics.

In August, 1939 the colonists' debts were computed to be about \$4850 each. 14/ This figure closely represents the results of the Debt Settlement Program after adjustments had been made on an average indebtedness of \$10,500--11,000. At the same time, August, 1939, a colonist's average income was determined to be approximately \$100 a month. 15/ Therefore, it was expected that a colonist could pay about \$190 a year and retire his debt in the originally-planned 30-year period of amortization. Yet, seed loans made in 1938 totaled \$16,812 and only \$3661 were repaid in that year. 16/ In January, 1941 the colonists requested of the Corporation postponement of payments on realty contracts until November 15th, 1942. The extension was granted, to those who were making payments on short-term loans, to give the colonists an opportunity

13/ W. W. Head, op. cit., v. Two, p. 45.

14/ V. W. Johnson and D. E. Doty, Preliminary Report on the Economic Phases of a Comprehensive Land-Use Planning Study of the Matanuska Valley, Alaska, Washington, D. C., December 1939, p. 65.

15/ V. W. Johnson and D. E. Doty, op. cit., p. 52.

16/ J. P. Crimmons, op. cit., Part VIII, pp. 23-26.

to liquidate overdue indebtedness in the Corporation's accounts receivable, seed loans, special notes, and chattels.

Payments began after the extension of time was granted. In the 11 months following the colonists' request 24 percent of them made some payments or arrangements to pay on their debts (Table 11) even though several asked for further debt reduction. ^{17/} In 1941 and 1942 payments continued, with encouragements from the Corporation's staff. However, in those two years the colonists incurred an additional total of \$30,000 in mortgage notes in order to equip barns for the production of Grade A milk; this was an expense not anticipated by the planners. By November, 1942, the Corporation received nearly \$232,000 on colonists' short-term obligations or about two-thirds of the sum in their accounts and notes receivable; also, more than \$5000 were paid on realty contracts before installments were due. ^{18/} In the cases of extreme delinquency, the Corporation repossessed the land by legal procedure.

Payments on realty contracts began in November, 1942. Since then the maintenance of current status in payments has been reported to be fair to good. The payments were not analyzed for this study because they include installments from old settlers as well as original, selected, and unselected replacement colonists; more recent colonists made down payments when obtaining a tract; many of the payments were made with non-farming income; and because some colonists have refinanced their debts through governmental or private agencies. In 1948 from 70 to 75 percent of the realty payments were current or not more than one payment behind schedule. ^{19/} By then, also, the Corporation did not consider loans for improvement of farms, the purchase of chattels, or the financing of crops if adequate funds were obtainable from some other source.

Colonists who resigned from the project have a poor record in debt payment. Upon resignation a colonist signed a note for the sum owed. However, no security for the note was available, and the colonists interrogated by mail have indicated that there has been no general improvement in their finances since they left The Colony. None of the notes is known to have been collected and losses on such obligations have amounted to \$272,432 (Table 12, Item 4).

No funds were available for loans to homesteaders in 1935. This was an oversight in planning which should not recur because it aided the development of a rift between colonists and homesteaders who were already in The Valley. In 1936 approval was secured for the Corporation to use \$25,000 of its funds for Old Settlers Loans. However, discrepancy continued. Loans generally were limited to less than \$2500, no credit was extended at the Trading Post, and settlers' loans were repayable in

^{17/} Alaska Rural Rehabilitation Corporation, File 616-2, Memorandum on Number of Colonists in Each Classification in Regard to Debt Payments, December 5, 1940.

^{18/} W. W. Head, op. cit., v. One, pp. 1 and 3 of accounts.

^{19/} Alaska Rural Rehabilitation Corporation, Annual Report For Fiscal Year Ended June 20, 1948, Palmer, Alaska, 1948, p. 5.

Table 11.--Classification of Matanuska Valley Colonists in
 Regard to Debt Payments, December 5, 1940 17a/

Classification	: Tract	: Tract neglected 1940	
	: Farmed	: Partly*	: Totally
	: 1940		
Farmers who have not recognized debts	39	13	8
Farmers who inquired about debts or answered letters but have made no payments or arrangements	35	6	2
Farmers who have made some payments and/or arrange- ments for some or further payments	31	3	0
Farmers who suggest or pro- pose to check out of The Colony	0	1	3
Totals	105	23	13

*Leased some or all of land to others or allowed part of tract to remain unused.

17a/ Alaska Rural Rehabilitation Corporation, File 616-2, Memorandum on Number of Colonists in Each Classification in Regard to Debt Payments, December 5, 1940.

Table 12--Items of Loss in ARRC Costs of Colonization
(by November 1942) 23/

<u>Item of Loss</u>	<u>Cost</u>
Warehouse No. 1 fire	\$ 313,268.85
Farm machinery lost or destroyed	20,314.10
Homesite buildings sold to permit enlargement of tracts	8,765.84
Accounts, Chattels, Gratuities of colonists resigned from project	272,432.40
Transfer of Assets of Community Center to the Cooperative	531,238.36
Excess costs of power plant equipment	2,642.72
Fire fighting equipment lost or destroyed	4,059.25
Unabsorbed homesite building expenses	387,553.77
Debt Settlement Program (not including cost of land)	1,110,775.31
Debt Settlement Program (cost of land only)	26,785.30
Unabsorbed land clearing costs	<u>259,549.89</u>
Total	\$2,947,385.79

23/ W. W. Head, op. cit., v. Two, *passim*.

10 annual installments rather than the colonists' 30. In addition, the total sum available for Old Settlers Loans was insufficient. It was nearly used up in 20 loans to homesteaders between September 1936 and February 1937 20/ and by June 1, 1937 \$25,800 had been loaned to homesteaders.

Payments on homesteaders' loans were kept current. By the end of 1938 interest was paid on 19 of the loans and payments on principals were made on two. In late 1942 about \$14,800 remained to be paid. 21/ Between 1942 and 1947, when Old Settlers Loans were due, well over 90 percent of this type of indebtedness was liquidated. In general, the homesteaders proved to be responsible financially but arrangements to aid them during the colonization of the Matamuska Valley were grossly inadequate.

20/ J. P. Crimmons, op. cit., Pt. VIII, pp. 28-29.

21/ W. W. Head, op. cit., v. One, p. 1 of accounts.

Caution is advisable when Matanuskan financial experiences are used as guides for planning new settlement. The reasons for caution are: all costs of colonization were not included in the Corporation's accounting; some of the ARRC's accounting was improperly done; The Colony's organization was restricted to rehabilitation of disadvantaged persons; costs of items in 1948 were greater than, often double, the costs in 1935; expenses were great due to unexpected misfortunes, such as, the warehouse fire and damage to materials during strong wind storms; several of the colonists left The Colony, and unpaid debts, because of administrative difficulties or lack of financial responsibility; and, the colonization was carried out quickly and without adequate precolonization study. At least 54 percent of the \$5,400,000 spent on The Colony was charged off in connection with the points noted above (Table 12). In spite of the losses, though, possibly 40 percent of the money spent was in The Valley in credits in 1948; the ARRC's net assets were valued at \$890,865; 22/ \$731,238-worth of physical assets granted to the Matanuska Valley Farmers Cooperating Association in 1939 were there, less depreciation; the value of roads built and improved in 1935 and 1936 was present, less depreciation; the land cleared during colonization was in use or available for use; and, a third of the original colonists and nearly half of the selected replacements were rehabilitated and, in some cases, held deeds for their land. Above all, to the credit of colonization in 1935 was the presence in 1948 of a growing community.

General recommendations may be made for financing new settlement. These are: estimate expenses and appropriate funds at the end of careful planning, rather than at the beginning of or during the process; organize a continuing centralized system to account for disbursements and revenue; provide funds on the same basis for new and old settlers in an area; prevent or minimize debt reductions for settlers; provide public services within the limits of accepted planning procedures and the limits of cost of such services elsewhere in Alaska; and, appropriate funds for loans to be made by an experienced agency for the purchase and clearing of land (suggested provisions of loans: on real estate and clearing, 40-year loans at four percent interest and on chattels, five-year loans at five percent interest).

Somewhat different than the recommendations above are those of the committee in Palmer. The committee suggested, with respect to financing settlement, the following: subsidize clearing of perhaps 10 acres for each settler by charging a nominal rate per acre and use a loaning program for the clearance of more than 10 acres; the financing program covering farm development and need for chattels should contemplate a self-supporting basis being reached in four to six years; maximum developmental loans would not exceed \$15,000 and should be repayed in 30 years whereas loans for chattels should be limited to \$7500 and be liquidated within the useful life of the security; one agency should supervise farm development and operation; the financing program should be open to

22/ Alaska Rural Rehabilitation Corporation, Financial Statements, op. cit., p. 2.

new and old settlers in an area; obtaining title to land should be by outright purchase; and, Federal aid should be available for the establishment of community facilities and, perhaps, cooperatives and other forms of business. 24/

Included among the community facilities that the committee noted are roads. These, and other forms of transportation, are of primary significance in all of Alaska. Transportation deserves especial consideration in both future planning and the analysis of the Matanuska Valley Colony.

The railroad arrived in the Valley on the Alaska Railroad. This was the only connection with the rest of the Territory in 1912 (1913, 14). Nineteen years earlier, in 1893, the railroad was built through the Valley. The single-track line was built from Anchorage northward to the head of Lake Iliamna where a series of bridges carried it westward to Wasilla Junction. Thence the rail line went westward, through the hills of Wasilla, and thence westward to Fairbanks. Five additional Junctions, also, a branch line was run northward, to the coal fields at Moose Creek and thence west to the open valley of the Nekechuk River. It was the railroad that was the Valley's first link with the rest of the Territory. Food, equipment, materials, baggage, and people could be brought to Anchorage and shipped in 1912.

The Valley's open pattern of roads began to be filled in after the railroad was built. Prior to 1912 traffic moved on five major trails which radiated from Lake Iliamna north and southward to the hills of Wasilla in the Talkeetna Mountains and the coal deposits at Fairbanks. The trails were used to pack supplies up to the mines and down to the valley. However, when the railroad was constructed, the trails began to be abandoned and most of the trails were abandoned. Some were built from Wasilla to the following places: northward to the gold mine at the head of the Little Talkeetna River; south to the Talkeetna, westward to the bridge across the Nekechuk River.

24/ C. W. Peters, op. cit., pp. 1 and 2.

Chapter 7

TRANSPORTATION LINES FOR THE COLONY

Means of transport were limited when the colonists arrived in 1935. Only a branch line of the Alaska Railroad connected Palmer siding and the rest of the Territory. Within The Valley the road pattern was triangular. These roads were built after 1916 and were mostly unrelated to previously existing trails. The improvement of the roads for The Colony was inadequately planned and poorly timed although The Valley now can be reached by road, railroad, and the air. Facilities for modern transportation are basic in any design for Alaska. New settlement, to be successful, requires careful planning for and the preliminary development of the facilities before the establishment of the communities.

The colonists arrived in The Valley on the Alaska Railroad. This was the only connection with the rest of the Territory in 1935 (Fig. 16). Nineteen years earlier, in 1916, the railroad was built through The Valley. The single-track line was laid from Anchorage northeastward to the head of Knik Arm where a series of bridges carried it northward to Matanuska Junction. Thence the main line went westward, through the site of Wasilla, and thence northward to Fairbanks. From Matanuska Junction, also, a branch line was run northeastward, by way of Palmer siding, to tap the coal fields at Moose Creek and eastward and at Chickaloon in the upper valley of the Matanuska River. It was the railroad that was The Colony's first lifeline; over it were carried all of the food, equipment, materials, baggage, and people until the highway to Anchorage was completed in 1936.

The Valley's open pattern of roads began to be filled in after the railroad was built. Prior to 1916 traffic moved on five major trails which radiated from Knik Village north- and northeastward to the gold placers in the Talkeetna Mountains and the coal deposits at Chickaloon. ^{1/} The trails were used to pack mining equipment and supplies inland and gold ore back to Knik Village. However, when the railroad was constructed, Wasilla became the new center of settlement and most of the trails were abandoned. Roads were built from Wasilla in the following directions: northeastward to the gold mines by way of the Little Susitna River gorge in the Talkeetnas, eastward to the bridge across the Matanuska

^{1/} D. H. Sleem, Map of Willow Creek Mining District, Seward, Alaska, 1910, scale 1/125,000.

TRANSPORTATION LINES FOR THE COLONY

Means of transport were limited when the colonists arrived in 1915. Only a branch line of the Alaska Railroad connected Palmer siding and the rest of the Territory. Within the Valley the road pattern was triangular. These roads were built after 1915 and were mostly unrelated to previously existing trails. The improvement of the roads for the Colony was an extremely planned and costly thing although the Valley now can be reached by road, railroad, and air. Facilities for road and transportation are basic in any design for Alaska. It is essential to be successful, require careful planning for and the preliminary development of the facilities before the establishment of the community.

The colonists arrived in the Valley on the Alaska Railroad. This was the only connection with the rest of the Territory in 1915 (Plat. 16). Nineteen years earlier, in 1916, the railroad was built through the Valley. The stage-trail line was laid from Anchorage northward to the head of Lake Iliamna where a series of bridges carried it northward to Metamora Junction. Thence the main line went westward through the site of Westville, and thence northward to Belvedere. From Metamora Junction, also, a branch line was run northward, by way of Palmer siding, to tap the coal fields of House Creek and westward out of Chitina from in the upper valley of the Metamora River. It was the railroad that was the Colony's first lifeline; over it were carried all of the food, equipment, materials, baggage, and people until the highway to Anchorage was completed in 1936.

The Valley's open pattern of roads began to be filled in after the railroad was built. From 1916 trails were laid to give better access to the various parts of the Valley north- and southward to the gold placers in the Taltostun Mountains and the coal deposits at Chitina. The trails were used to pack mining equipment and supplies inland and gold ore back to Lake Iliamna. However, when the railroad was completed, Westville became the new center of settlement and west of the trails were abandoned. Roads were built from Westville in the following directions: northward to the gold mines by way of the Little Belton River gorge in the Taltostun, eastward to the bridge across the Metamora

MATANUSKA VALLEY, ALASKA FACILITIES FOR TRANSPORTATION, 1936

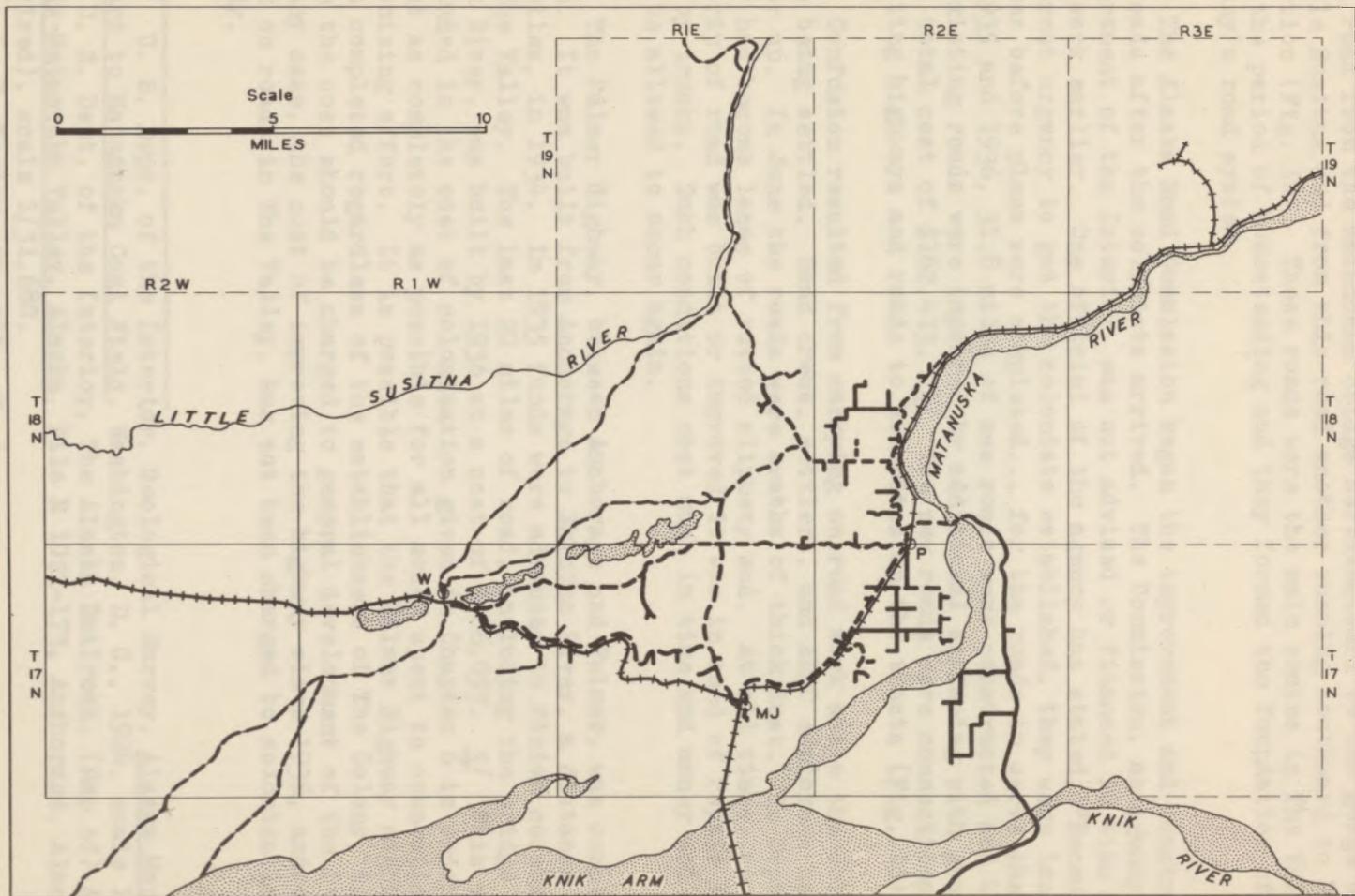


Figure 16

- | | |
|--|---|
| <ul style="list-style-type: none"> — NEW ROAD BUILT IN 1935 OR 1936 - - - OLD ROAD IMPROVED IN 1935 OR 1936 - · - · - OLD ROAD UNIMPROVED IN 1935 OR 1936 | <ul style="list-style-type: none"> ▲ LANDING FIELD FOR AIRPLANES + + + ALASKA RAILROAD, MAIN LINE + · + · ALASKA RAILROAD, BRANCH LINE |
| <p>○ SITE OF VILLAGE: P-PALMER, W-WASILLA, MJ-MATANUSKA JUNCTION</p> | |

АНСАЛА, ҲАЛЛАВ АНСУНАТАМ
 ҲАЖИРАТ ҲАҚИДАГИ ҲАҚИҚАТЛАР

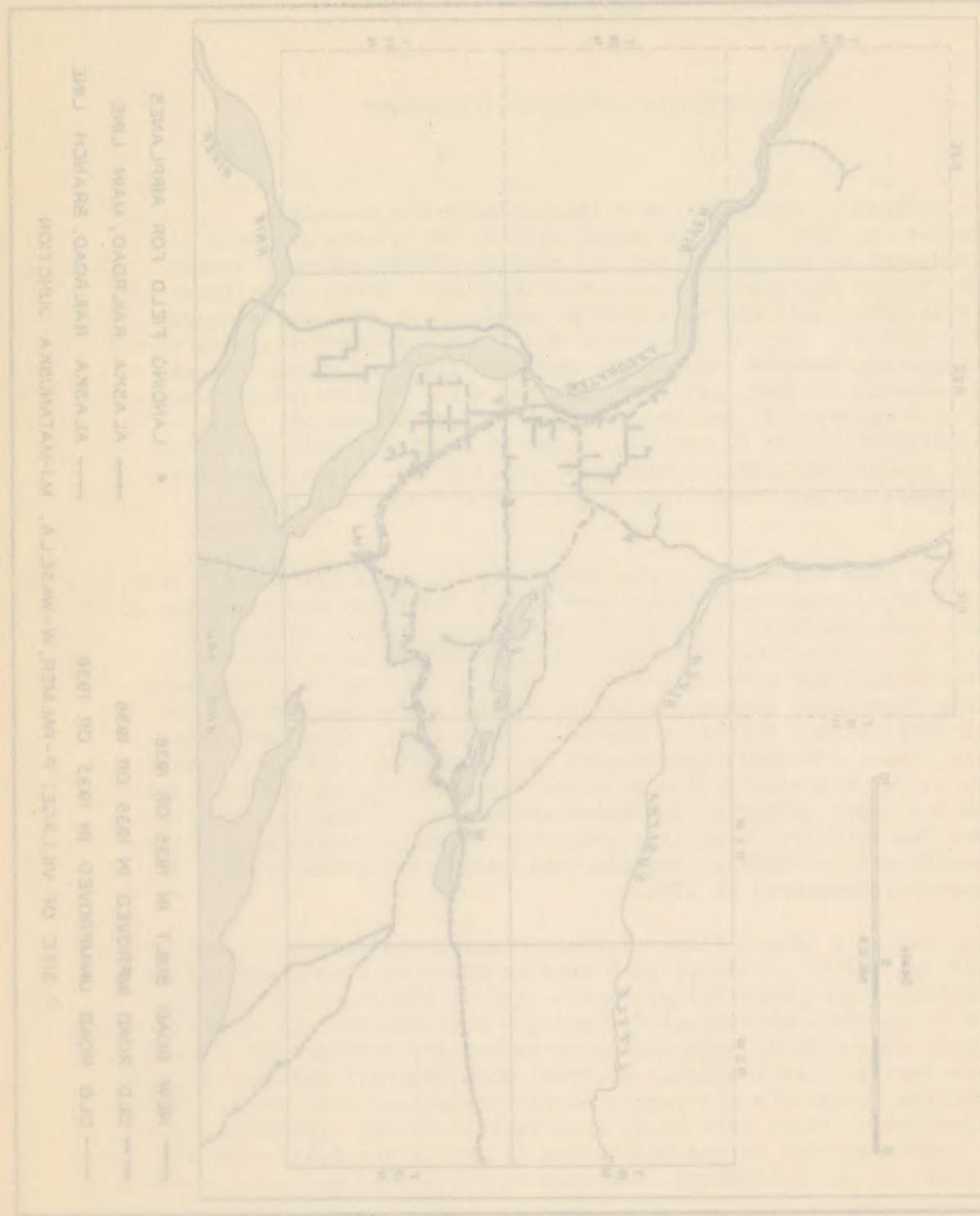


Figure 16

River, near the site of Palmer, and southeastward to Matanuska Junction and thence to Palmer siding. ^{2/} The triangular pattern was completed by a road from the Matanuska bridge northwestward to the gorge of the Little Susitna and from this road another running southward to Matanuska Junction (Fig. 16). These roads were the main routes in The Valley during the period of homesteading and they formed the foundation of The Colony's road system.

The Alaska Road Commission began the improvement and construction of roads after the colonists arrived. The Commission, an agency in the Department of the Interior, was not advised or financed in time to do the work earlier. One official of the agency has stated, "Because of the apparent urgency to get the colonists established, they were landed at Palmer before plans were completed... for the roads to serve them." ^{3/} In 1935 and 1936, 31.8 miles of new roads were constructed and 47.0 miles of existing roads were improved by additional surfacing with gravel, both at a total cost of \$162,413. ^{4/} The new roads were connections between existing highways and roads to homesites on the tracts (Fig. 16).

Confusion resulted from carrying on road work while the colonists were being settled. Road crews, settlers, and ARRC employees held each other up. In June the roads were swaths of thick dust. In September they had become lanes of rutted slippery mud. At all times, as soon as a strip of road was built or improved it was in need of repair from hard use by trucks. Such conditions cost much in time and money and should not be allowed to occur again.

The Palmer Highway, between Anchorage and Palmer, was completed in 1936. It was built from Anchorage to Eklutna River, a distance of about 30 miles, in 1934. In 1935 funds were advanced to finish construction to The Valley. The last 20 miles of road, including the bridge over the Knik River, was built by 1936 at a cost of \$486,053. ^{5/} This sum is included in the cost of colonization given in Chapter 6 in order to account as completely as possible for all money spent in connection with the colonizing effort. It is possible that the Palmer Highway might have been completed regardless of the establishment of The Colony, in which case the cost should be charged to general development of the Territory. In any case, the cost of improving the highway since 1936, and of similar work on roads in The Valley, has not been charged to colonization in this study.

^{2/} U. S. Dept. of the Interior, Geological Survey, Alaska Map 25, Seward to Matanuska Coal Field, Washington, D. C., 1924, scale 1/250,000 and U. S. Dept. of the Interior, The Alaska Railroad, (Map of) Agricultural Lands-Matanuska Valley, Alaska, File R 1022-173, Anchorage, Alaska, 1934 (Revised), scale 1/31,680.

^{3/} I. P. Taylor, op. cit., p. 1.

^{4/} Ibid.

^{5/} I. P. Taylor, op. cit., p. 1.

The Valley could be reached easily in 1948 (Fig. 17). The Glenn Highway, built in 1941 and 1942, extended northeastward from Palmer 142 miles to connect the Village with the rest of the Territorial system of roads and the Alaska Highway. There was bus service on both the Glenn and the Palmer Highway. The highways were graveled and plans have been made to surface the Palmer Highway with asphalt in 1949.

Internal movement in The Valley was easy. Roads connected all of the better farming land in the eastern half of the area with Palmer and Wasilla although the Butte district could be reached only by one road, the Palmer Highway (Fig. 17). On the flatter land, just to the northwest, and south of Palmer and around Bodenbug Butte, the roads had the rectangular pattern characteristic of the western two-thirds of the United States. Elsewhere in The Valley, in the low hills of the floor of the area, the pattern of roads was triangular. All of the main roads were graveled and were maintained from a station of the Alaska Road Commission at Palmer. None of the routes has been classified by the U. S. Army Corps of Engineers as being better than a loose-surfaced, graded, dry-weather road. 6/

There were two daily trains on the railroad between Palmer and Anchorage. One train made a round-trip haul of freight and passengers to the coal mines at Wishbone Hill. The other was a modern rail-car for round-trip commuting from Palmer.

Facilities for airplanes were available. At Palmer there was a small airport, built recently by cooperative action of residents of The Valley, to which commercial service was expected to be extended from Anchorage and other points in 1949. Also, at least two local private pilots living south of Palmer used their fields as landing strips. At Wasilla, too, there was a landing strip and at Goose Bay, in the southwestern corner of The Valley was an abandoned military airport. These facilities are especially important for the future because Alaskans have been using air transport more and more in recent years and are likely to continue doing so.

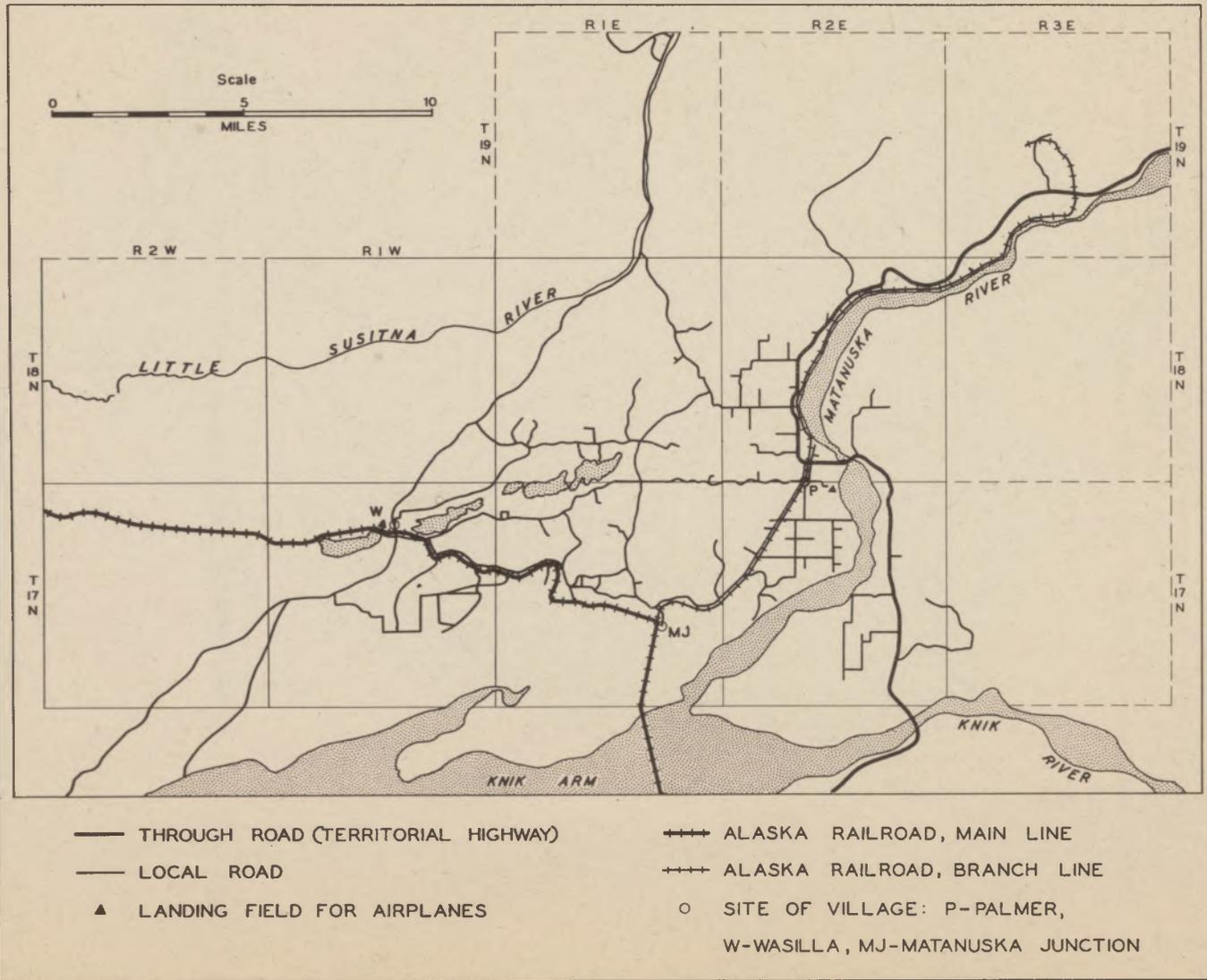
Provision for transportation must be made early in planning for new group settlement. Not only must there be lines for the movement of settlers to an area but, also, routes by which goods may be moved to markets quickly and cheaply. All of the areas in Alaska that are noted in the Preface as potentially suitable for settlement may be reached by the Alaska Railroad or by a Territorial Highway, excepting Kodiak Island and the Kuskokwim River valley. 7/ Each of the areas has nearby facilities

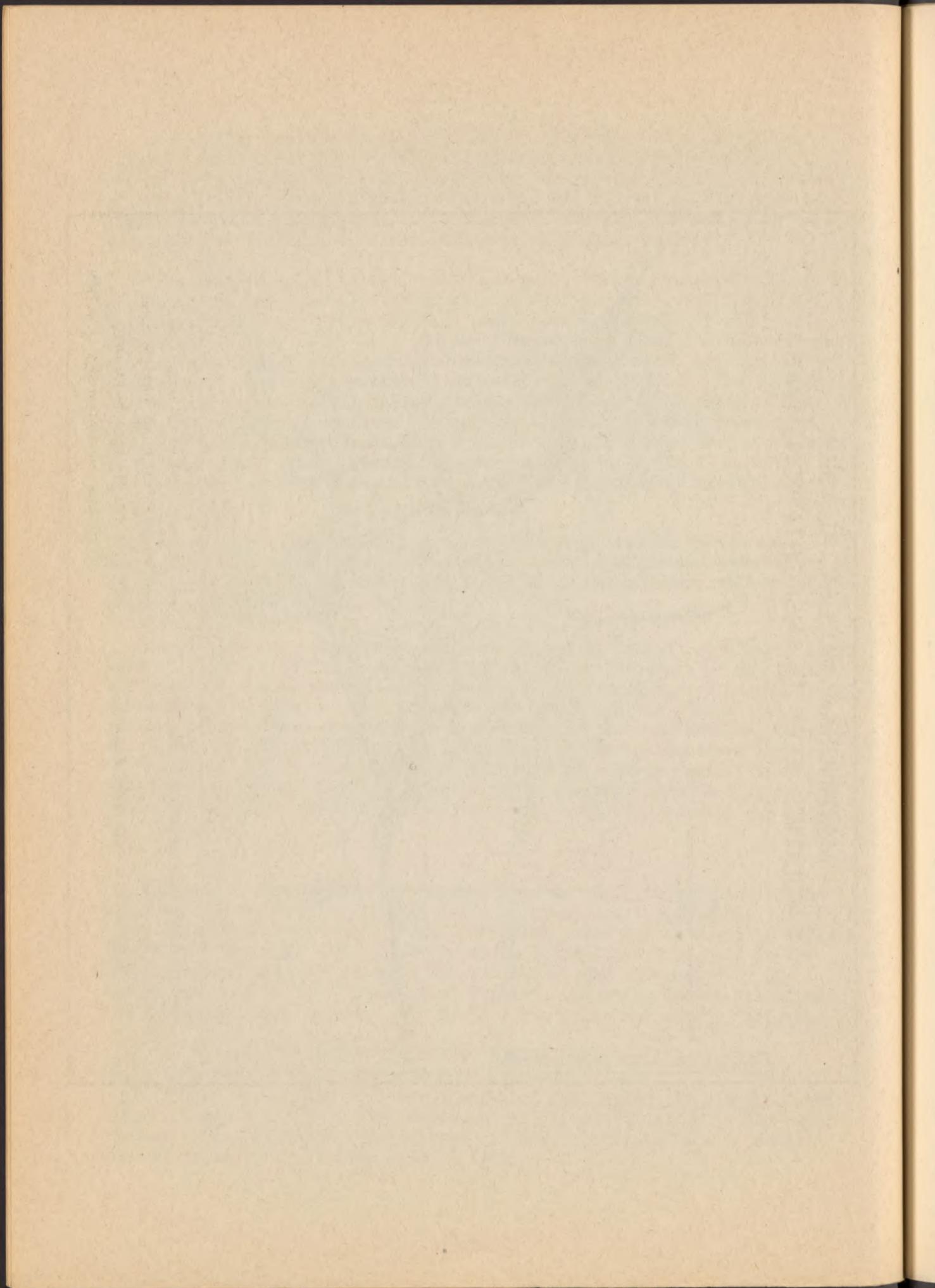
6/ U. S. Army, Corps of Engineers, Alaska, Matanuska Quadrangle (Grid Zone K), Portland, Oregon, 1942, scale 1/62,500.

7/ Office of Highway Engineer, Principal Road System of Alaska, Juneau, Alaska, January 1, 1945. Not described in this publication is the Kenai Highway; this was under construction in 1948 from Kenai Lake to Homer and was expected to be completed in 1949.

MATANUSKA VALLEY, ALASKA FACILITIES FOR TRANSPORTATION, 1948

Figure 17





for airplanes which are suitable for use by twin-engined, DC-3-type planes. 8/ However, none is suitable for settlement on the basis of local roads. The construction of such at the present time would cost approximately \$10,000 a mile, double the expense of building roads for the Matanuska Colony. 9/ If the roads in a new area of settlement are built before the settlers arrive, then the farm building program, and others, likely will be less difficult and less expensive than they were in The Valley.

8/ U. S. Dept. of the Interior, Alaska Map E, Washington, D. C., 1946, scale 1/2,500,000.

9/ I. P. Taylor, op. cit., p. 2.

The following table shows the results of the survey of the
 local roads, the construction of which is the present
 project. The total length of the roads to be constructed is
 approximately 200 miles. The estimated cost of the roads is
 \$1,000,000. It is to be noted that the roads are to be
 built before the winter sets in, and the cost of the roads
 will be less than that of the roads to be built in the
 winter.

J. E. Dyer, Director of the Federal Bureau of Investigation
 Washington, D. C.

Chapter 8

THE FARM BUILDING PROGRAM IN THE COLONY

The farm building program was executed crudely. By the first winter, most of the colonists' dwellings were barely ready and housing for animals was inadequate. Control of the distribution of building materials was weak. Houses and barns were erected inefficiently. Throughout the program haste and confusion so reigned that costs were higher than had been anticipated. The core of these difficulties was incomplete, and partly impractical, planning which was prompted by the speed required. For any new settlements it is recommended that advice on the construction of farm buildings be available and that the settlers be responsible directly for the erection and financing of their own buildings.

The plan for constructing farm buildings in The Colony involved too much regimentation. Nearly all steps were taken for the colonists, not by them. Probably the plan was made thus to assure rapidity of construction, which was accomplished in part, and low cost per building, which was not attained even after reductions by adjustment of colonists' debts. However, it is certain that some officials in Washington insisted upon the building program followed because they felt that The Colony was a governmental project and, therefore, that the buildings should be large and nice appearing to the expected visitors.

The colonists lived first at Palmer siding. Upon arrival a village of tents was to be ready, erected by the 420 transient workers. However, the village was not ready because most of the laborers arrived with the colonists rather than before them. Therefore, laborers and colonists alike had to work long hours during the first days to erect the board-floored tents (Fig. 18) and the temporary buildings. There the colonists lived until they acquired a tract.

In June and July, 1935, most of the families were moved from Palmer. Each went, with its tent, to the numbered camp nearest its tract (Fig. 14) and there the family stayed until its farm home was ready. Each camp was run cooperatively and each had elected representatives on the Colony Council (Chapter 3). Telephone lines connected the camps and the offices at Palmer and the colonists' supplies were trucked to the camps once weekly.

While in the camps, the colonists chose plans for their homes. Five plans were available, each of which was prepared in Washington, and, so

THE NEW BUILDING PROGRAM IN THE COUNTRY

The new building program was started mainly by the first winter, most of the colonists' dwellings were built by the first winter, most of the colonists' dwellings were built by the first winter, most of the colonists' dwellings were built by the first winter...

The plan for constructing new buildings in the colony involved the first winter, most of the colonists' dwellings were built by the first winter, most of the colonists' dwellings were built by the first winter...

The colonists lived first at Jamestown. When they arrived at Jamestown, they found the colony in a state of chaos. The first winter, most of the colonists' dwellings were built by the first winter...

In June and July, 1607, most of the families were moved from Jamestown to the new settlement. The first winter, most of the colonists' dwellings were built by the first winter...

While in the country, the colonists made plans for their future. The first winter, most of the colonists' dwellings were built by the first winter...

far as is known, by architects without Alaskan experience. Although every colonist had his choice of a plan, he was not allowed to combine the desirable features of two or more designs -- therein lies the most universal complaint of all colonists. The homes, termed "rustic cottages" by the architects, were to be built of imported lumber, locally-cut logs or combinations of both (Figs. 19, 20, and 30). No plan included allowances for a full basement or for a full foundation set in the ground. Transient workers were to do most of the construction even though many of the colonists were experienced builders (Chapter 5).

In the summer of 1935, concentration was on the erection of homes. All were nearly enough completed for occupancy by the coldest part of the winter and by May, 1936, the interiors of 71 percent of the homes were finished. 1/ Construction was according to the plans chosen by the colonists and they were even more dissatisfied than when they picked the plans. Many colonists felt the foundations were inadequate, that supports were placed improperly, that the buildings were unnecessarily drafty and cold, and that the workmanship of the transient laborers was not good. Also, several homes were built on what proved to be unsheltered portions of tracts, locations that neither the colonists nor the administrators would have approved if precolonization studies of winds in The Valley had been made.

The construction of barns lagged. In the winter of 1935, after the colonists were in their homes, the barns were started but in the meantime most of the animals were sheltered in the colonists' original tent-homes. By May, 1936, 113 barns were reported completed. 2/ but the construction of one per occupied tract was not realized until late in 1936. All of the buildings were erected from the same plan and most colonists agree that the design and construction were poor, even though the colonists were allowed to do more work on their barns than on their homes. Each barn was 32 feet square, 32 feet high, and had a "hip" roof. All were built on small cement pilings. The walls were logs to 10 feet above the ground and then siding to the roof (Fig. 21). From the start of construction the colonists complained that the barns were too small, inefficiently partitioned, drafty, and poorly built. The criticisms were apparently justified.

The drilling of wells also lagged. Ten were drilled at Palmer but one was abandoned and five were dry holes or tapped formations with salt water. The other four wells were connected with a water tower that was erected at Palmer. However, by September, 1935, only 42 wells had been drilled or dug in connection with colonization; 3/ only 108 colonists'

1/ R. L. Sheely, Telegraphic Progress Report to L. Westbrook, Palmer, Alaska, May 23, 1936.

2/ R. L. Sheely, op. cit.

3/ A. M. Goodman, op. cit., p. 7.

Figure 18.-Colonists' Tent-Homes in Village of
Palmer; June, 1935.



Figure 19.-A Matanuskan Colonist's Log Home;
August, 1941.

Figure 18.-Colonists' Tent-Dens in Village of
Palmer, June, 1932

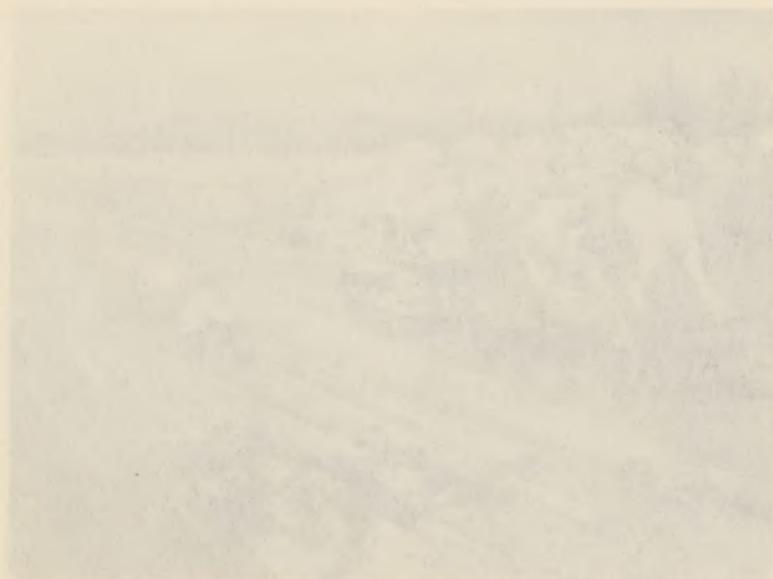


Figure 19.-A-Metastasis Colonists' Tent-Dens
August, 1931

Figure 20.-A Matanuskan Colonist's Log-Frame Home;
September, 1948.



Figure 21.-A Matanuskan Colonist's Barn;
July, 1941.

Figure 20 - Aerial photograph of the study area, 1954

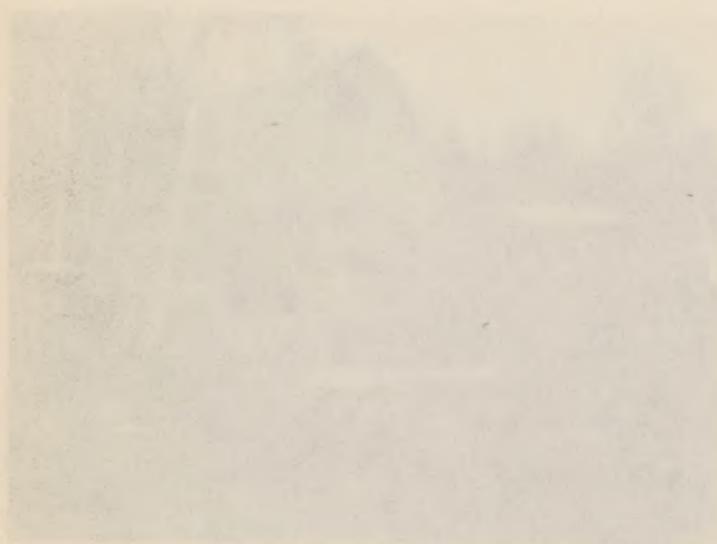
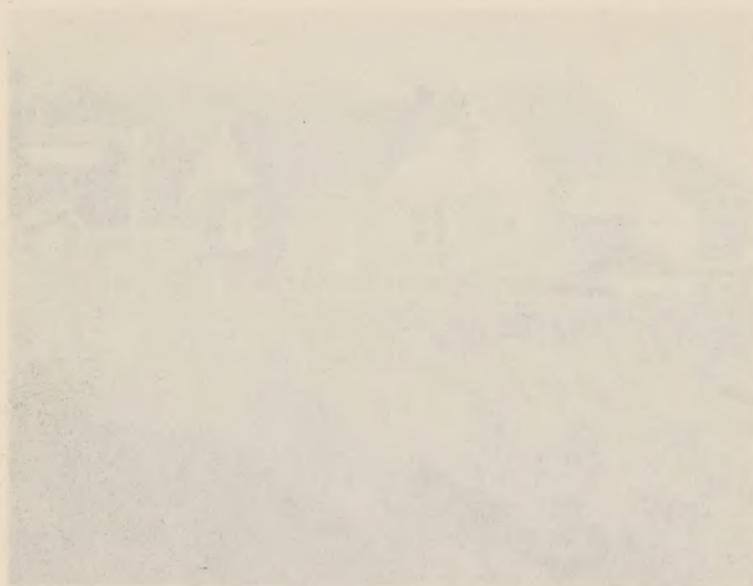


Figure 21 - Aerial photograph of the study area, 1954

wells were drilled and in use by May, 1935 ^{4/} and 154 by April, 1937. ^{5/} The drilling program proceeded slowly for two reasons: emphasis on the Community Center in 1935 and 1936 and the difficulty of finding water.

One of the Alaskan paradoxes is the presence of areas where water lies on the surface and, yet, where a sufficient supply of potable water is hard to find. The floor of the Matanuska Valley, and of many other lowlands in Southern Alaska, is composed of a heterogeneous mixture of glacial materials in which the water table varies considerably. For example, the average depth of wells in use in The Valley in 1937 was 82 feet but an extreme variation between wells on adjacent 40-acre tracts was from 23 feet deep to 361 feet deep (Tracts 18 and 19). ^{6/} Also, at one 80-acre tract, No. 132, nine holes were drilled to depths of 75-510 feet without finding water. ^{7/} The logs of wells in The Valley should be brought up to date and analyzed. The relations of producing wells and their depths to surface and subsurface conditions of the wide variety of glacial landforms, that make up The Valley's floor, are unknown. However, of greater importance is the consideration of the Matanuskan drilling experience as a warning that presettlement studies should include investigation of water supplies.

Homes, barns, and wells cost more than was anticipated, for the reasons given above. The estimates in March, 1935 were \$1100 for a home and well and \$200 for a barn. ^{8/} These figures were revised in May to: \$985 per home, 50 barns at \$598 each and material for 150 barns at \$200 each, and \$140 per well. ^{9/} Actually, the appraised costs in May, 1936 averaged: \$1830 per dwelling, \$506 for each barn, and \$511 per well. ^{10/} The estimate on the barns was the only building cost anticipated accurately but the barns were the buildings considered least suitable by the colonists.

Appraisals had to be used for building valuations. This was because control of the distribution of building materials was lax. All materials were stored at Palmer and after a building plan had been picked the materials for a home were taken to the tract and piled. When the carpenters arrived some of the materials might be missing. In several cases reported,

^{4/} R. L. Sheely, Telegraphic Progress Report to L. Westbrook, op. cit.

^{5/} Alaska Rural Rehabilitation Corporation, Log Formation of Wells, Palmer, Alaska, April 1, 1937.

^{6/} Ibid., p. 6.

^{7/} Ibid., pp. 41-42.

^{8/} M. Callister, op. cit., p. 1.

^{9/} Alaska Rural Rehabilitation Corporation, File No. 100, op. cit., Alaska Project Budget Cost Summary, p. 1.

^{10/} Compiled from individual colonists' accounts in: Alaska Rural Rehabilitation Corporation, File 616-2, Statements of Proposed (Debt) Settlement, Palmer, Alaska, 1937.

wells were drilled and in use by May, 1937. The drilling program proceeded slowly for the reasons mentioned on the Community Center in 1935 and the difficulty of finding water.

One of the Alaska geologists in the presence of some other water lines on the surface and, yet, where a sufficient supply of potable water is hard to find. The floor of the Matanuska Valley, and of many other basins in Eastern Alaska, is composed of a heterogeneous mixture of glacial materials in which the water table varies considerably. For example, the average depth of water in one of the wells in 1937 was 25 feet but an extreme variation between wells on adjacent 50-acre tracts was from 25 feet down to 981 feet deep (Travis 28 and 29). Also, at one 50-acre tract, No. 125, three holes were drilled to depths of 75-200 feet without striking water. The logs of wells in the valley should be brought up to date and analyzed. The relation of produced wells and their depths to surface and subsurface conditions of the valley of glacial basins, that some of the Matanuska floor, are common. However, of greater importance is the consideration of the Matanuska drilling operations as a whole that present-day studies should include investigation of water supplies.

House, barn, and wells near, some that was established for the year 1937. The estimate in March, 1937 was \$1000 for a house and well and \$200 for a barn. The house and well were estimated to cost \$1000 per acre. The barn was estimated to cost \$200 per acre. The estimate on the house was the only building cost estimated. The estimate on the barn was the building cost estimated. The estimate on the house was the building cost estimated. The estimate on the barn was the building cost estimated.

Materials had to be used for building operations. The cost of the distribution of building materials was low. All materials were stored at Palmer and after a building plan had been fixed the materials for a house were taken to the tract and piled. When the construction started some of the materials might be changed. In several cases reported.

- 1/ H. I. Smith, Telegraphic Progress Report to I. Westwood, 22-23.
- 2/ Alaska Rural Rehabilitation Corporation, for November of 1937.
- 3/ Palmer, Alaska, April 1, 1937.
- 4/ Ibid., p. 2.
- 5/ Ibid., pp. 21-22.
- 6/ H. Callahan, 22-23, p. 1.
- 7/ Alaska Rural Rehabilitation Corporation, File No. 122, 22-23.
- 8/ Alaska Project Budget Cost Summary, p. 1.
- 9/ Compiled from individual estimates' accounts for Alaska Rural Rehabilitation Corporation, File No. 122, 22-23, 23-24, 24-25, 25-26, 26-27, 27-28, 28-29, 29-30, 30-31, 31-32, 32-33, 33-34, 34-35, 35-36, 36-37, 37-38, 38-39, 39-40, 40-41, 41-42, 42-43, 43-44, 44-45, 45-46, 46-47, 47-48, 48-49, 49-50, 50-51, 51-52, 52-53, 53-54, 54-55, 55-56, 56-57, 57-58, 58-59, 59-60, 60-61, 61-62, 62-63, 63-64, 64-65, 65-66, 66-67, 67-68, 68-69, 69-70, 70-71, 71-72, 72-73, 73-74, 74-75, 75-76, 76-77, 77-78, 78-79, 79-80, 80-81, 81-82, 82-83, 83-84, 84-85, 85-86, 86-87, 87-88, 88-89, 89-90, 90-91, 91-92, 92-93, 93-94, 94-95, 95-96, 96-97, 97-98, 98-99, 99-100, 100-101, 101-102, 102-103, 103-104, 104-105, 105-106, 106-107, 107-108, 108-109, 109-110, 110-111, 111-112, 112-113, 113-114, 114-115, 115-116, 116-117, 117-118, 118-119, 119-120, 120-121, 121-122, 122-123, 123-124, 124-125, 125-126, 126-127, 127-128, 128-129, 129-130, 130-131, 131-132, 132-133, 133-134, 134-135, 135-136, 136-137, 137-138, 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804-805, 805-806, 806-807, 807-808, 808-809, 809-810, 810-811, 811-812, 812-813, 813-814, 814-815, 815-816, 816-817, 817-818, 818-819, 819-820, 820-821, 821-822, 822-823, 823-824, 824-825, 825-826, 826-827, 827-828, 828-829, 829-830, 830-831, 831-832, 832-833, 833-834, 834-835, 835-836, 836-837, 837-838, 838-839, 839-840, 840-841, 841-842, 842-843, 843-844, 844-845, 845-846, 846-847, 847-848, 848-849, 849-850, 850-851, 851-852, 852-853, 853-854, 854-855, 855-856, 856-857, 857-858, 858-859, 859-860, 860-861, 861-862, 862-863, 863-864, 864-865, 865-866, 866-867, 867-868, 868-869, 869-870, 870-871, 871-872, 872-873, 873-874, 874-875, 875-876, 876-877, 877-878, 878-879, 879-880, 880-881, 881-882, 882-883, 883-884, 884-885, 885-886, 886-887, 887-888, 888-889, 889-890, 890-891, 891-892, 892-893, 893-894, 894-895, 895-896, 896-897, 897-898, 898-899, 899-900, 900-901, 901-902, 902-903, 903-904, 904-905, 905-906, 906-907, 907-908, 908-909, 909-910, 910-911, 911-912, 912-913, 913-914, 914-915, 915-916, 916-917, 917-918, 918-919, 919-920, 920-921, 921-922, 922-923, 923-924, 924-925, 925-926, 926-927, 927-928, 928-929, 929-930, 930-931, 931-932, 932-933, 933-934, 934-935, 935-936, 936-937, 937-938, 938-939, 939-940, 940-941, 941-942, 942-943, 943-944, 944-945, 945-946, 946-947, 947-948, 948-949, 949-950, 950-951, 951-952, 952-953, 953-954, 954-955, 955-956, 956-957, 957-958, 958-959, 959-960, 960-961, 961-962, 962-963, 963-964, 964-965, 965-966, 966-967, 967-968, 968-969, 969-970, 970-971, 971-972, 972-973, 973-974, 974-975, 975-976, 976-977, 977-978, 978-979, 979-980, 980-981, 981-982, 982-983, 983-984, 984-985, 985-986, 986-987, 987-988, 988-989, 989-990, 990-991, 991-992, 992-993, 993-994, 994-995, 995-996, 996-997, 997-998, 998-999, 999-1000, 1000-1001, 1001-1002, 1002-1003, 1003-1004, 1004-1005, 1005-1006, 1006-1007, 1007-1008, 1008-1009, 1009-1010, 1010-1011, 1011-1012, 1012-1013, 1013-1014, 1014-1015, 1015-1016, 1016-1017, 1017-1018, 1018-1019, 1019-1020, 1020-1021, 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1203-1204, 1204-1205, 1205-1206, 1206-1207, 1207-1208, 1208-1209, 1209-1210, 1210-1211, 1211-1212, 1212-1213, 1213-1214, 1214-1215, 1215-1216, 1216-1217, 1217-1218, 1218-1219, 1219-1220, 1220-1221, 1221-1222, 1222-1223, 1223-1224, 1224-1225, 1225-1226, 1226-1227, 1227-1228, 1228-1229, 1229-1230, 1230-1231, 1231-1232, 1232-1233, 1233-1234, 1234-1235, 1235-1236, 1236-1237, 1237-1238, 1238-1239, 1239-1240, 1240-1241, 1241-1242, 1242-1243, 1243-1244, 1244-1245, 1245-1246, 1246-1247, 1247-1248, 1248-1249, 1249-1250, 1250-1251, 1251-1252, 1252-1253, 1253-1254, 1254-1255, 1255-1256, 1256-1257, 1257-1258, 1258-125

replacements were not obtained from the stock piles in Palmer but from the nearest pile of materials for another home. In other instances the replacement materials were drawn at Palmer. The result was that some building accounts disclosed twice as many doors or windows as were put in the building while others listed perhaps two-thirds as many! Therefore, an appraisal was necessary but, of course, appraising could not account for the materials that disappeared from Palmer or tracts and did not reappear in farm buildings by the time the appraisals were made in May, 1936.

Debt adjustment was the Corporation's means of assuming part of the unexpected cost of colonists' buildings. To this extent, the ARRC charged off \$387,553 as unabsorbed homesite building construction costs (Table 12). The costs that were absorbed in the realty contracts were not computed for this study because a proportionate credit and a blanket reduction in the Debt Settlement Program (Table 10) affected homesite building costs to an unknown extent. However, it is known that a portion of an additional \$254,754 is chargeable to colonists' buildings. This sum was spent on temporary buildings, the moving of tent-houses to the tracts, and structures in the Community Center that were moved or torn down. 11/

The full story of the costs of colonists' buildings is still untold. Some buildings have had to be moved in connection with the enlargement of 40-acre tracts. Farm buildings in addition to those planned for have had to be erected. Barns have been rebuilt and, in a few cases, two have been combined on a single tract to afford sufficient barn-space. Houses have had to be wired, basements and insulation have been added, and foundations have had to be replaced. All these changes required time and money which in several instances have amounted to be more than the usually-expected costs of maintenance. And, still more improvements in buildings are necessary.

In 1948, farmsteads in The Colony were closer together than in the original colonists' home states. In The Colony rural dwellings averaged a quarter to three-eighths of a mile apart (Fig. 29) whereas the separation in the dairying region of the upper Great Lakes states was half to three-quarters of a mile. 12/ Doubtless the difference was the settlement on tracts of 40 acres in The Valley and of 160 to 320 acres in Michigan, Minnesota, and Wisconsin. Also, dwellings in The Colony tended to be concentrated at road junctions. This location was specified in the original

11/ W. W. Head, *op. cit.*, v. Two, p. 43.

12/ Average distances between farmhouses are shown for two small parts of the dairying region near the Great Lakes in: J. A. Barnes and A. H. Robinson, *A New Method for the Representation of Dispersed Rural Population*, *Geographical Review*, v. XXX, 1940, pp. 136 and 137.

replacements were not obtained from the stock piles in Palmer but from the nearest pile of materials for another house. In other instances the replacement materials were drawn at Palmer. The results are that some building accounts disclosed twice as many hours or windows as were put in the building while others listed perhaps two-thirds as many. Therefore, an adjustment was necessary but, of course, accounting could not account for the materials that disappeared from Palmer or locate and did not represent in fact buildings by the time the accounts were made in May, 1958.

Cost adjustment was the Corporation's plan of several parts of the unexpected cost of materials, buildings. To this extent, the ABC changed off \$107,522 as unallocated building construction costs (Table 12). The costs that were absorbed in the early contracts were not computed for this study because a proprietary credit and a double reduction in the Cost Estimation Program (Table 10) offset the building costs. However, it is known that a portion of an additional \$250,724 is chargeable to materials, buildings. This was an amount spent on temporary buildings, the major amount being in the bridge, and structures in the Community Center that were moved or torn down. 14

The full story of the costs of materials, buildings is still outside. Some buildings have had to be moved in connection with the enlargement of 40-acre tracts. New buildings in addition to those planned for have had to be erected. Extra work has been required and, in a few cases, two houses been destroyed as a consequence to avoid existing two-story houses. Work had to be done, improvements and insulation have been added, and foundations have had to be replaced. All these changes required time and money which in several instances have amounted to be more than the originally expected costs of materials. And, still more improvements in buildings are necessary.

In 1958, materials in the Colony were drawn together from the original contractors' name states. In the Colony many buildings averaged a quarter to three-quarters of a mile apart (Fig. 23) whereas the separation in the building region of the Great Lakes states was half to three-quarters of a mile. 15 Besides the differences in the settlement on tracts of 40 acres in the Valley and of 100 to 200 acres in Michigan, Minnesota, and Wisconsin. Also, buildings in the Colony tended to be concentrated at road junctions. This location was specified in the original

14 W. W. Reed, op. cit., p. 47.
15 Average distances between farmhouses are shown for two small parts of the building region near the Great Lakes in L. A. Brown and A. E. Robinson, A New Method for the Representation of Dispersed Rural Population, Geographical Review, v. XII, 1922, pp. 136 and 137.

architectural plans. However, there has been a conscious trend to extend such close proximity. The distance which should separate farmsteads is partly a sociological phase of planning and partly a result of the size of farms and the pattern of roads. The significance of separation of neighboring Alaskan farm families has not been investigated but Matanuskan experiences suggest that planners of new group settlement give the matter careful consideration.

The points for planning farm building programs for proposed settlements are summarized. First, allow sufficient time for careful planning and coordinated execution of any program. Second, provide information on suitability of land for agricultural and non-agricultural occupations so that settlers may anticipate the number and capacity of farm buildings necessary. Rockie's maps of The Valley and the Bureau of Land Management's maps of the Kenai, Anchorage, and Wasilla-Goose Bay areas ^{13/} are examples of useful data; however, more detailed classification may be advisable and the other Alaskan areas suitable for group settlement should be classified. Third, information on the quantity and quality of water available should be determined and published for areas selected for settlement. Fourth, time should be allowed to complete the construction of basic transportation facilities before the farm building program is under way; such an allowance will help prevent the development of confusion and unwarranted costs. Fifth, encourage the settlers to erect their buildings from their own plans but make available advice on dwelling designs, farm lay-outs, ^{14/} construction materials, and the location of farmsteads. For example, it is inadvisable to insist upon the erection of standardized barns on each farm regardless of the anticipated type of farm or size of a settler's herd. Sixth, advise settlers to postpone shipping his family, animals, and equipment to an area until shelter and other basic necessities are available for each. This advice has been given by many Alaskans and governmental officials for several years; disregarding it in the Matanuskan

^{13/} W. A. Rockie, Physical Land Conditions in the Matanuska Valley, op. cit., (13 maps of) Erosion and Land Use Conditions, Washington, D.C., 1936, scale 1/31,680. U. S. Dept. of the Interior, Bureau of Land Management, (Map of) Kenai Peninsula-Alaska, Land Classification, Map No. BLM-LC-AU-1, Washington, D. C., 1946, scale 1/126,720. _____, (Map of) Anchorage Area-Alaska, Land Classification, Map No. BLM-LC-AU-4, Washington, D. C., 1946, scale 1/63,360. _____, (Map of) Wasilla-Goose Bay Area-Alaska, Land Classification, Map No. BLM-LC-AU-6, Washington, D. C., 1947, scale 1/31,680.

^{14/} Suggestions for farm layouts and for the details of farm buildings may be obtained from: G. T. Trewartha, Some Regional Characteristics of American Farmsteads, Annals of the Association of American Geographers, v. XXXVIII, 1948, pp. 169-225.

colonization was expensive. Seventh, plan for settlers to finance their own construction in order that they can build for immediate needs only and as they are able to afford buildings. This action will require Federal funds for loans. Eighth, plan for an initial settlement unit on a scale more modest than that attempted in the Matanuska Valley. This sort of planning will permit taking action to prevent the chaos that accompanies setting up of many farm buildings at the same time. Settlement in Alaska does need stimulation but not to the point that the action becomes agitation. Finally, planning for community facilities for new group settlement might well be for only basic necessities to be supplied on a small scale. It will be made clear in the following chapter that the development of community facilities in the Matanuskan Colony did not parallel the farm building program.

Chapter 9

THE COLONY'S COMMUNITY FACILITIES

Facilities for community services were inadequate during the early years of The Colony. Either the facilities were lacking or there were more than were needed at the time. In 1935 and 1936 temporary arrangements were made at Palmer for purchasing and marketing, education, housing, hospitalization, recreation, and public utilities. By the end of 1936 most of the buildings for these services were erected, in a model layout called the Community Center. All buildings, excepting the churches, were of frame construction. Building costs were greater than had been anticipated. A cooperative was formed and forced upon the colonists in 1936 but it was not managed by them until 1940. Electrical power was extended to farms in The Valley in 1941. Both before and after that date, the growth of private business in Palmer included servicing facilities in addition to those supplied by the Corporation. By 1948, community services in Palmer, and in The Valley as a whole, were sufficient at least for minimum demands. The most important exception then was the Matanuska Valley Farmers Cooperating Association, which suffered from difficulties of organization rather than from lack of facilities. In general, the difficulties of providing adequate community services at the start of colonization were the products of three requirements imposed upon the planners: 1) too little time for complete planning, 2) the necessity of planning for the settlement of a relatively large number of people on new farms at the same time, and 3) the need to allow for the organization of and the erection of a complete village at Palmer while other phases of settlement were being executed. These requirements need not be made of planners of new group settlement.

The Colony had no facilities for community services in the beginning. Palmer was only a branch railroad siding. To supply the facilities, architects drafted a model plan for a Community Center. The plan, approved a year after colonization began, included buildings for the servicing of a cooperative agricultural community (Fig. 22).

The Community Center was built at Palmer siding. The site selected was the flat land just to the east of the railroad tracks and station. One original plan called for the establishment of a village at a road

THE COMMUNITY CENTER AT PALMER, ALASKA - 1936 -

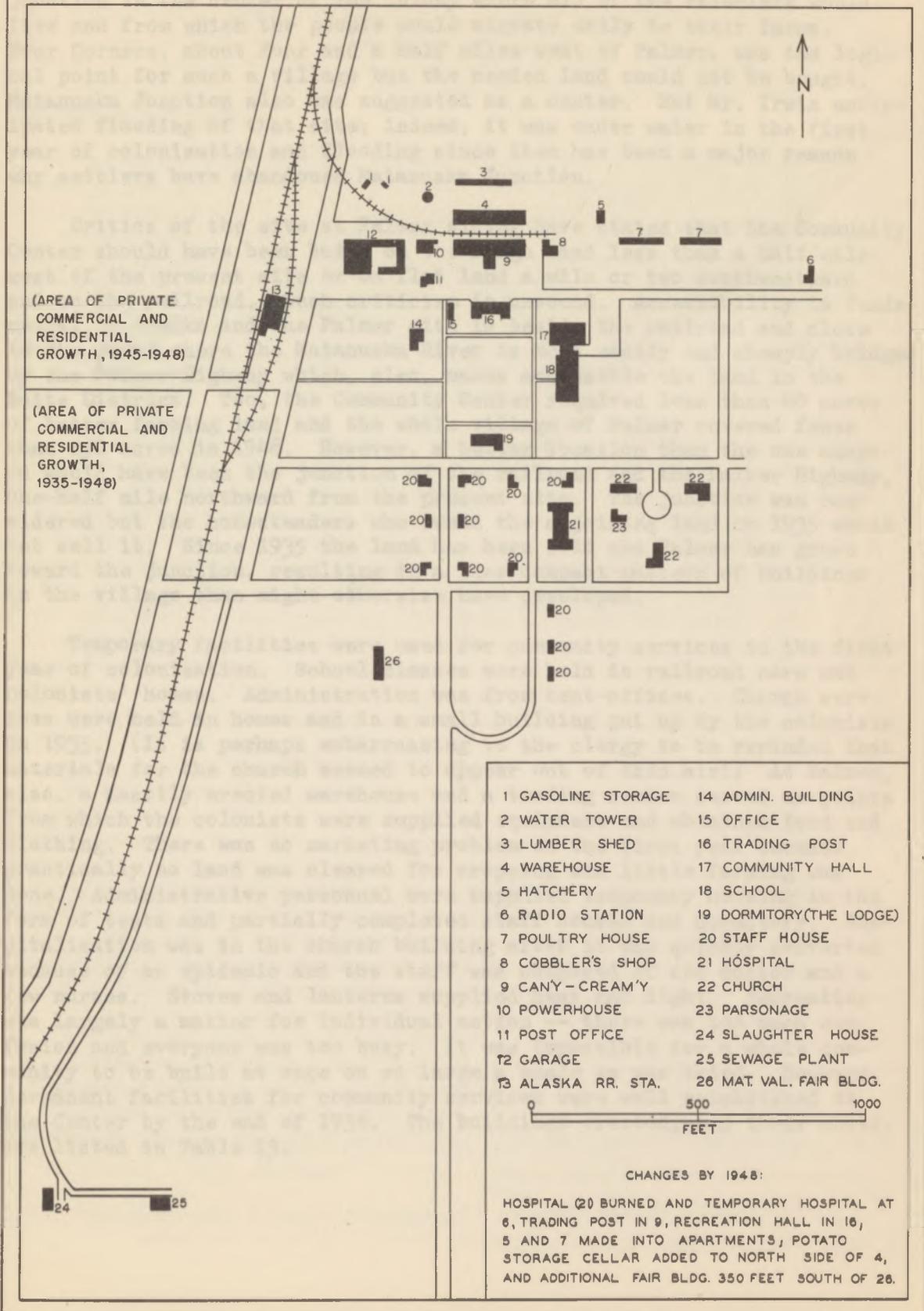


Figure 22

THE COMMUNITY CENTER AT PALMER, ALASKA
- 1936 -

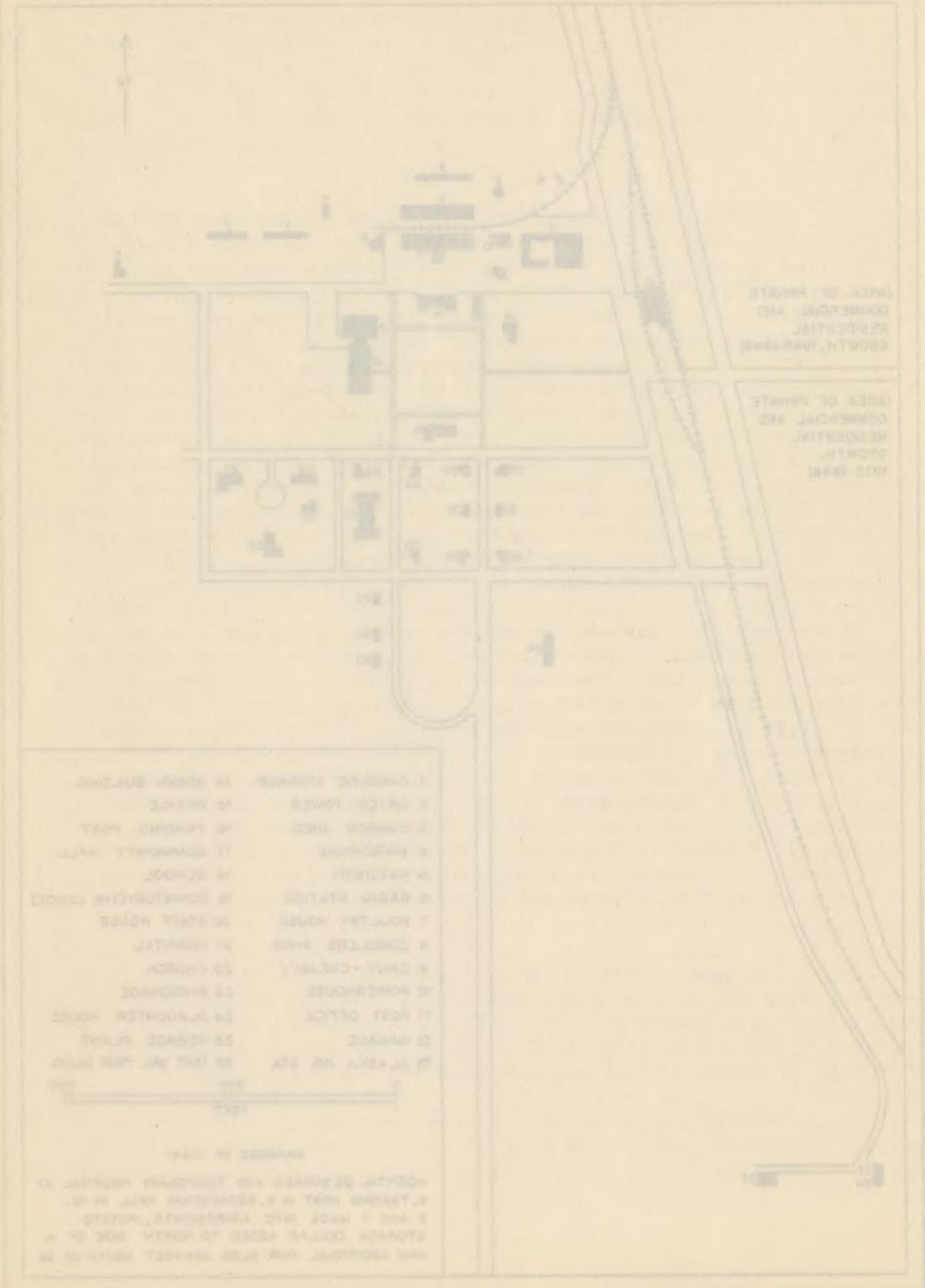


Figure 52

junction in the center of The Colony where all of the colonists would live and from which the people would migrate daily to their farms. Four Corners, about four and a half miles west of Palmer, was the logical point for such a village but the needed land could not be bought. Matanuska Junction also was suggested as a center. But Mr. Irwin anticipated flooding of that site; indeed, it was under water in the first year of colonization and flooding since then has been a major reason why settlers have abandoned Matanuska Junction.

Critics of the site at Palmer siding have stated that the Community Center should have been built on the rough land less than a half mile west of the present site or on flat land a mile or two southwestward and on the railroad. Such criticism is unsound. Accessibility is fundamental in Alaska and the Palmer site is beside the railroad and close to the point where the Matanuska River is most easily and cheaply bridged by the Palmer Highway which, also, makes accessible the land in the Butte District. Too, the Community Center required less than 40 acres of better farming land and the whole village of Palmer covered fewer than 250 acres in 1948. However, a better location than the one adopted would have been the junction of the railroad and the Palmer Highway, one-half mile northward from the present site. The junction was considered but the homesteaders who owned the adjoining land in 1935 would not sell it. Since 1935 the land has been sold and Palmer has grown toward the junction, resulting in a less compact pattern of buildings in the village than might otherwise have developed.

Temporary facilities were used for community services in the first year of colonization. School classes were held in railroad cars and colonists' homes. Administration was from tent-offices. Church services were held in homes and in a small building put up by the colonists in 1935. (It is perhaps embarrassing to the clergy to be reminded that materials for the church seemed to appear out of thin air!) At Palmer, also, a hastily erected warehouse and a trading center served as points from which the colonists were supplied equipment and obtained food and clothing. There was no marketing problem in the first year because practically no land was cleared for cropping and little farming was done. Administrative personnel were supplied temporary housing in the form of tents and partially completed staff houses and dormitory. Hospitalization was in the church building after it was quickly converted because of an epidemic and the staff was composed of one doctor and a few nurses. Stoves and lanterns supplied heat and light. Recreation was largely a matter for individual action -- there was too much confusion and everyone was too busy. It was impossible for a whole community to be built at once on so large a scale as was tried. However, permanent facilities for community services were well established at the Center by the end of 1936. The buildings erected, and their costs, are listed in Table 13.

Table 13.--Buildings Erected at Community Center
for Community Services

<u>Building</u>	<u>Cost Per Books</u> <u>1/</u>
Administration office	\$ 7,467.57
Bakery (Later Post Office)	2,063.82
Cannery and creamery (Later also Trading Post)	40,650.10
Cabinet shop	2,378.20
Dormitory (The Lodge)	28,210.60
Farm Machinery shed	1,850.31
Garage	16,760.08
Greenhouse	800.00
Hospital	22,874.80
Houses, staff (13)	56,798.08
Paint shed	753.39
Poultry houses and hatchery	16,102.31
Power house and generator	19,522.41
School and community hall	100,326.06
Sewage disposal plant	1,338.82
Shoe repair shop	2,246.79
Slaughter house and stock corral	4,538.91
Trading Post (includes Barber Shop and offices; later Recreation Center)	14,223.53
Warehouse No. 1	1,978.51
Warehouse No. 3	22,144.19

1/ W. W. Head, op. cit., vs. One and Two, passim.

In 1936 a cooperative for buying and selling was organized. 2/ This was not a cooperative according to the use of the term by specialists on cooperatives. Organization was brought about by the ARRC, rather than by the colonists, as a step toward eventual government of The Colony by its people. All colonists were required to be members of the Coop by an article which was in the Corporation's realty contract until 1943. Some colonists balked at the contract because the Coop was managed until 1940 by the ARRC, under a contract, and the people were discouraged with The Corporation. Other colonists signed the contracts and then violated the term requiring marketing only through the Coop because they felt the prices were low and the management

2/ Matanuska Valley Farmers Cooperating Association, Articles of Incorporation and Code of By-Laws, Palmer, Alaska, no date.

was poor. Legal actions followed the violations and some colonists were penalized or left The Colony. ^{3/} Certainly much of the storminess in the Coop's history has been the result of misunderstandings and clashes of personalities. Few things can be more disturbing to an isolated agricultural community than lack of harmony in its farmers' cooperative.

The Corporation managed the Coop until January, 1940. Then the ownership of the Community Center was turned over to the Coop and colonists assumed control of the community services involved. In the transfer of the Center the ARRC acquired a 30-year non-interest-bearing note for \$200,000 and on the basis of appraised valuations of the facilities the Corporation thus lost \$531,238 (Table 12). To continue operations after 1940, the Coop borrowed from the Farm Security Administration, now the Farmers Home Administration, sums totaling \$291,960 and the ARRC commitment was changed to a second mortgage. The Coop's payments on the F. H. A. notes were up-to-date in 1948.

The Cooperative has been accused of supplying inadequate services for purchasing and marketing. There have been six reasons for the inadequacy: 1) incomplete precolonization marketing study, 2) the lack of continued and experienced direction of the Coop's operations, 3) clashes between personalities of employees of the Corporation and the Coop, 4) membership relations within the Coop have been poor, 5) the Coop was forced upon the colonists rather than arising from combined action of farmers needing the services, and 6) the facilities for purchasing and marketing were more than were needed at first and were too great for the Coop to handle without experienced guidance. It is beyond the scope of this study to discuss these points. Specialists have investigated the Coop and have made recommendations for improvements. ^{4/}

Education has been under the Territory's guidance since the school was completed in 1936. In one building students go from the first through the 12th grades (Fig. 23). Collegiate instruction is available at the University of Alaska near Fairbanks. The operation of the Palmer School is similar to that of consolidated township schools in the United States. Children are taken to and from school by bus, modern programs and equipment are in use, and the classes in 1948 were crowded. The other school in The Valley, at Wasilla, is similar to but smaller than the one at Palmer and additional facilities are needed at both places.

^{3/} An example is the highly publicized case of a truck farmer which is described fairly in: V. W. Johnson and D. E. Doty, op. cit., pp. 40-41.

^{4/} C. W. Peters, A Report on the Activities and Current Status of the Matanuska Valley Farmers Cooperating Association, Palmer, Alaska, July 1946. C. E. Broderson and B. J. Downey, Letter to M.V.F.C.A. Board of Directors, Palmer, Alaska, November 5, 1948.



Figure 23. The Territorial School at Palmer; July, 1941. The frame construction is characteristic of buildings in the Community Center.

There have been few and irregular newspapers and radio broadcasts since The Colony was founded. In the first years, mimeographed bulletins and small papers told the colonists of happenings "Stateside". None of these lasted, except The Valley Settler which has been an organ of the Coop rather than a weekly newspaper. By 1948, radio broadcasts from Anchorage and two daily newspapers printed in that city were readily available to The Valley's people. In addition, a weekly newspaper, The Valley Frontiersman, was filling a gap by supplying information, local news, and printing services.

A dormitory and 13 staff homes were built at the Community Center in 1936. These buildings were erected to afford housing for school teachers and personnel of the Corporation and the Coop. The dormitory, called The Lodge, also has been used as a hotel. Particularly since World War II, housing facilities throughout Alaska have been scanty and

many agencies have been supplying housing in order to obtain personnel. For this reason and as a public service, the Coöp continued to manage The Lodge and the staff houses through 1948. Also, the cooperative hatchery and poultry houses have been used as residences since about 1938.

A modern hospital supplanted the converted church in 1936. The new building made available facilities in The Valley for modern medical treatment, excepting major operations which were performed in Anchorage. However, in the spring of 1946 the hospital burned to the ground. For several months medical facilities were lacking but a group of local residents formed The Valley Hospital Association and obtained and erected two quonset huts beside a small building -- the radio station in 1936 -- at the northeastern corner of the Community Center. In 1948 these facilities were meeting the medical requirements in The Valley and adjacent areas but there was dire need for more space, equipment, and comfortable quarters for the patients.

Three churches were in the plan for the Community Center. The buildings were erected in a single block at the southeastern corner of the Center (Fig. 22). They have filled the need for places for religious devotion, a strong need throughout the Territory, but only in part because three more churches have been erected elsewhere in Palmer.

The churches served as early recreational centers. In addition, motion pictures were shown and dances were held in the gymnasium of the school building. In 1946 a theater was built west of the railroad tracks in Palmer but through 1948 the school continued to serve as a recreational center for The Valley's people. In general, recreation has been left to the individuals' choice since the start of The Colony. For those persons who enjoyed outdoor activities the alternatives for recreation have been numerous.

Public utilities for the Community Center also were established in 1936. Electricity and steam for heat and power were generated at a power plant there. Water, sewage, and telephone lines were connected throughout the Center. However, such facilities have been extended to farms only in part. Commercial telephone service has been installed in The Valley and connected with the lines operated by the Alaska Railroad and the Army's Signal Corps. In 1941 electrical power lines were extended to The Valley from Anchorage's power plant at Eklutna Lake. The construction of the electrical facilities was financed by the Rural Electrification Administration and is operated by a local organization, the Matanuska Electric Association, Inc. The Community Center is serviced by the M. E. A. and the small generator at the power plant there can supply current in cases of emergency.

Fire and police protection were supplied at first by the Corporation. By 1948, the people of The Valley had assumed most of these responsibilities. Fires in buildings were fought by members of the

volunteer fire department. Controlled burning of timber and fire fighting in the woods was under the supervision of the Alaska Fire Control Service, an agency in the Department of the Interior. Policing in the Community Center was done by employees of the Coop and in the business district west of the railroad by a privately employed agent who is a member of the Territorial police.

Parts of the original water and sewage systems are still in use. However, both have been expanded. In about 1939, springs northwest of Palmer were connected by wooden pipe line to the water tower in the village and use of the wells was discontinued. Additions have been necessary to accommodate the growth of privately owned businesses and homes to the north, east, and west of the Community Center. These facilities are adequate for the present estimated population of 500 persons in Palmer. However, the main wooden-pipe water line should be replaced and additional lines probably will be needed if the growth of Palmer continues at the same rate as in the past ten years.

The cost of erecting facilities for complete community services was greater than had been anticipated. In the original estimate \$249,432 were budgeted for community buildings, such as, the school and community house, trading post, dormitory, and creamery-cannery. ^{5/} Actually, the cost of facilities for community services by October 1942 was \$918,651 (Table 14) without including that part of \$254,754 which was spent on temporary buildings in the Community Center. ^{6/} Certainly small items in this accounting and the cost of maintenance must have been anticipated by the planners to be covered by operating capital. However, even maintenance charges were high (Table 14); for examples, the power plant has been considered since construction to be excessively expensive to operate because of its design and the type of equipment installed in it and cooperative chicken raising was abandoned early. In general, the unexpected costs originated from the same difficulties as those experienced in the farm building program; hurried planning and the speed and magnitude of construction of facilities.

Growth of privately owned services paralleled that of The Colony. Whereas the Community Center is east of the railroad tracks in Palmer, most of the private establishments are west of the tracks. Stores, garages, restaurants, offices, and a new hotel are in two-story buildings clustered on the eastern edges of three blocks and facing the railroad. In addition, buildings have been erected on either side of the tracks between the commercial section of the village northward to the junction

^{5/} Alaska Rural Rehabilitation Corporation, File No. 100, op. cit., Alaska Project Budget Cost Summary, p. 1.

^{6/} W. W. Head, op. cit., v. Two, passim.

Table 14.--Cost of Facilities for Community Services in Matanuska Colony to October, 1942 7/

<u>Item</u>	<u>Cost</u>
Buildings in Community Center	\$456,223.81
Machinery & equipment, primarily for buildings in Community Center	347,045.92
Land and improvements, Community Center	6,546.57
Fire fighting equipment, lost or destroyed	4,059.25
Telephone system, rural and Community Center lines	2,031.23
Temporary hospital buildings, razed	831.62
Fire & police protection	8,717.38
Sewage system	26,701.99
Water system	<u>66,493.32</u>
Subtotal	\$918,651.09*
Maintenance of buildings in Community Center & water & sewage systems	46,614.51
Maintenance of Matanuska Valley Fair Association Buildings	<u>3,934.20</u>
Total	\$969,199.80

*Does not include portion of \$254,754 spent on temporary buildings in Community Center that were moved or razed.

7/ Alaska Rural Rehabilitation Corporation, File No. 100, op. cit., Alaska Project Budget Cost Summary, p. 1.

of the Palmer and Glenn Highways. Such development has resulted in a twin-centered village, expanding in the western center and to the northward (Figs. 24 and 25). The growth in western and northern Palmer has been rapid, particularly of residences, and many of the villagers are considering incorporation. By such action, new growth can be planned and the village may be eligible for financial aid from governmental sources for the improvement of public services.

More growth in Palmer is certain to take place. Palmer has advantages over Wasilla in accessibility and the facilities for community services are more numerous. Palmer is the center for governmental agencies in The Valley. In addition, Palmer is likely to become the location for processing plants should industries be established in the area. The villagers have a strong spirit, as is manifested regularly through

MATANUSKA VALLEY ALASKA
VILLAGE OF PALMER



Figure 24.- The village of Palmer; July, 1939. Enlarged vertical air view. North toward top of the picture. (Courtesy of Soil Conservation Service).

an active Chamber of Commerce; they will work for themselves through cooperative action whenever necessary and they are aware of the desirability of improving and adding to services available in the village.

Planning for community services for new group settlements will be difficult if Matanuskan experiences go unheeded. In the seven potential areas noted in the Preface there are few or no facilities for such services. There was none at Palmer when The Colony was founded and upon the basis of the attempts to erect complete facilities there the following recommendations are made: 1) allow a sufficiently long period to carefully anticipate the needs of the settlers; 2) emphasize presettlement examination of the character, location, and accessibility of present and potential sources of supply and markets; 3) plan for an original settlement of perhaps half as many persons as were involved in starting the Matanuskan Colony; 4) plan to supply basic services, such

as, education, the same way and on the same scale as they are offered elsewhere in Alaska; and, 5) make available funds for loans for the construction of community facilities by individuals and groups as the settlers develop needs for services. These needs, in agricultural communities, are likely to become apparent gradually if the clearing and cropping of new land are at all similar to what they have been throughout Alaska and, particularly, to the agricultural development in the Matanuska Colony.

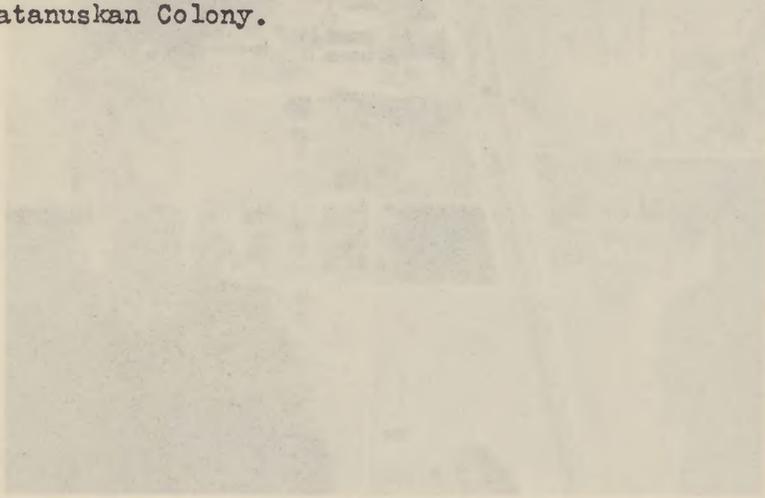


Figure 26 - The village of Palmer, July, 1937. (Courtesy of Soil Conservation Service.)

an active Chamber of Commerce; they will work for themselves through cooperative action wherever necessary and they are aware of the desirability of improving and adding to services available in the village.

Planning for community services for new group settlements will be difficult if Matanuska experience is repeated. In the new potential areas noted in the previous report there are few or no facilities for such services. There are now at Palmer and the Colony are located and now the basis of the attempt to erect complete facilities there the following recommendations are made: 1) allow a sufficiently long period to carefully analyze the needs of the settlers; 2) emphasize provision of the character, location, and accessibility of new and potential sources of supply and services; 3) plan for an early and substantial investment of perhaps half as many persons as were involved in starting the Matanuska Colony; 4) plan to supply basic services, such

MATANUSKA VALLEY ALASKA VILLAGE OF PALMER

COMMERCIAL ESTABLISHMENTS — THROUGH ROAD
 ■ SINGLE — LOCAL ROAD
 ■ SEVERAL ⇄ RAILROAD

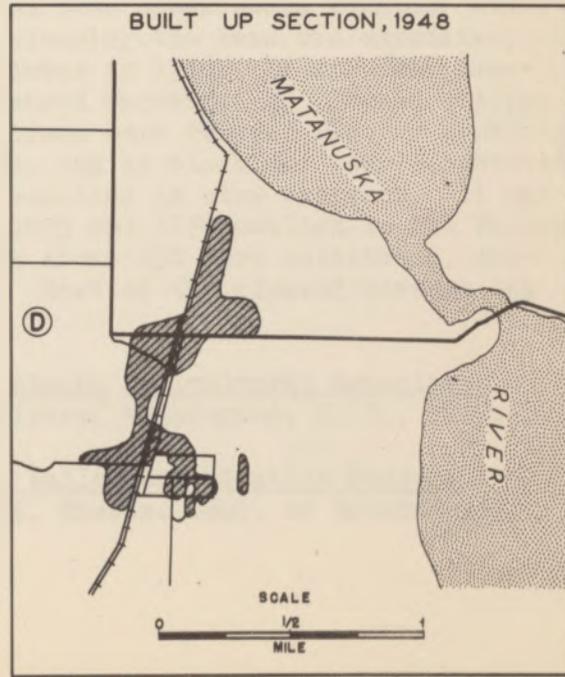
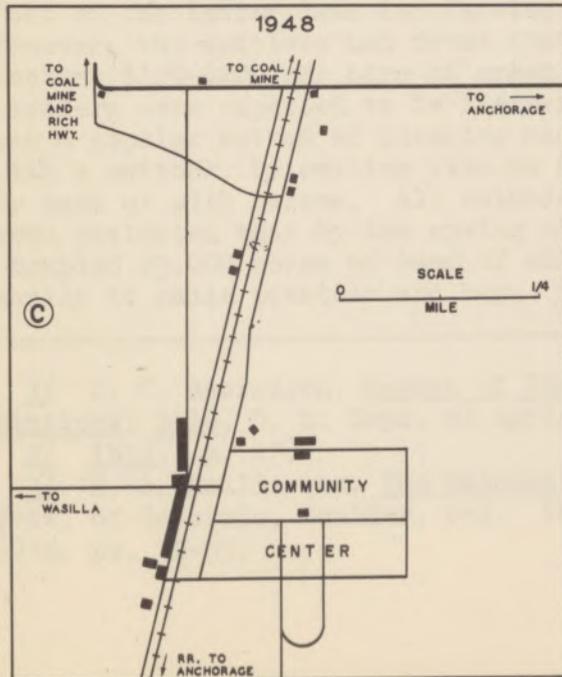
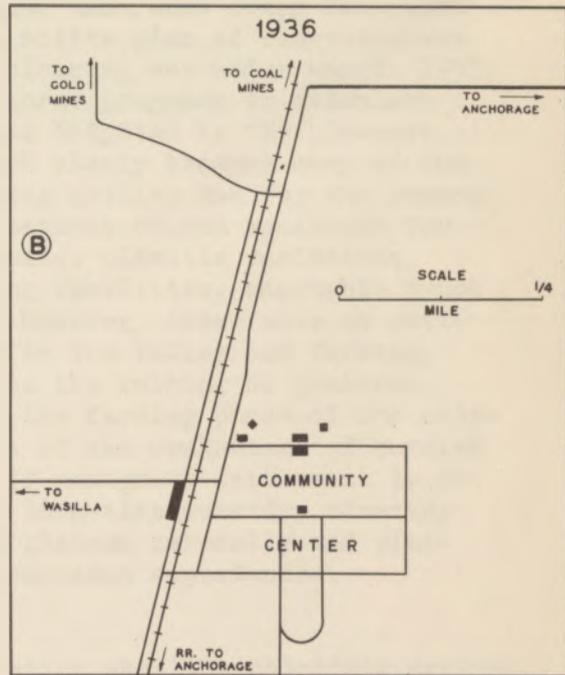
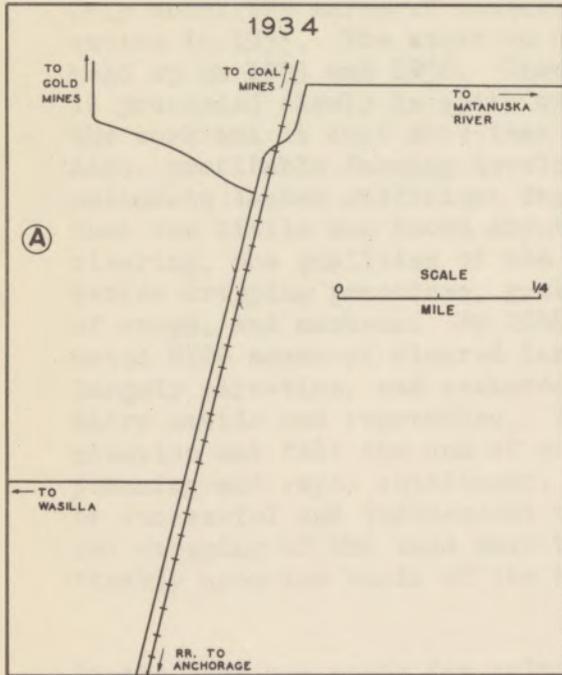
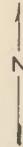
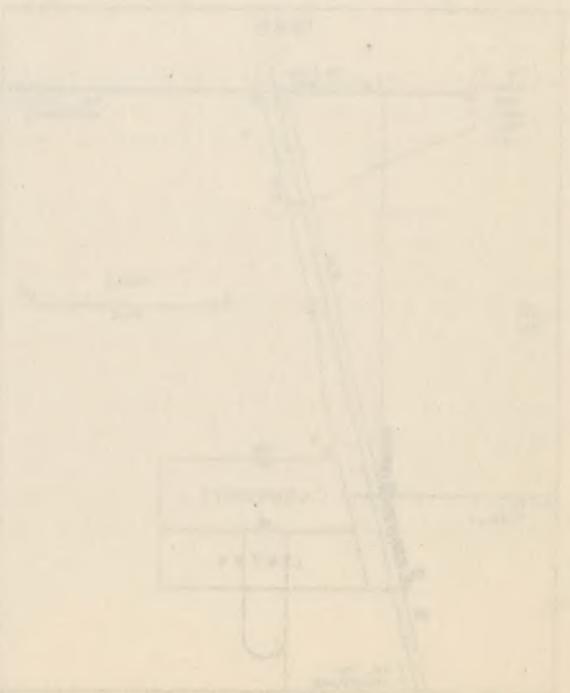


Figure 25

MATANUSKA VALLEY ALASKA VILLAGE OF PALMER

This map shows the village of Palmer, Alaska, in the Matanuska Valley. It is a typical Alaskan village, with a main street running north-south, and several smaller streets branching off. The village is situated on a hillside, and the surrounding area is mostly open fields. The map is a plan view, and the scale is 1 inch = 100 feet.



Chapter 10

CLEARING AND CROPPING THE COLONY'S LAND

Farming started late and progressed slowly in The Colony. Only about 175 acres of homesteaded land were ready for cultivation in 1935. The start on an active plan of clearance was held up in 1935 and 1936. Once clearing was under way in 1937, it proceeded slowly in spite of three programs to stimulate the work and it cost more than was budgeted by the planners. Also, profitable farming developed slowly because many of the colonists lacked sufficient farming ability and for the reason that too little was known about methods of and equipment for clearing, the qualities of the soils, climatic variations, better cropping practices, grazing facilities, adaptable types of crops, and markets. By 1948, however, there were an estimated 8500 acres of cleared land in The Valley and farming, largely part-time, was centered on the raising of potatoes, dairy cattle and vegetables. In the farming phase of the colonization was felt the sum of most of the weaknesses of hurried planning and rapid settlement. If new group settlement is to be successful and independent of long-time subsidy, clearing and cropping of the land must be planned carefully and practicably upon the basis of the Matanuskan experiences.

Little land was ready for cultivation when the colonists arrived. Most of the better land for farming had been homesteaded (Chapter 4). However, the settlers had found that clearing the land was expensive, costing \$125-\$200 per acre of green timber in 1918, ^{1/} and many homesteaders were reported to be inexperienced farmers. ^{2/} Ground burning was a popular method of clearing and trees were removed also by grubbing with a mattock, by cutting with an axe, and by block and tackle operated by hand or with horses. All methods resulted in slow progress. It has been estimated that by the spring of 1935 the 117 families in The Valley occupied 23,000 acres of land of which about 650 were cultivated, primarily to raise potatoes and hay. ^{3/} Most of the cleared acreage was

^{1/} C. C. Georgeson, Report of The Alaska Agricultural Experiment Stations, 1918, U. S. Dept. of Agriculture, Washington, D. C., 1919, p. 16.

^{2/} Ibid., p. 17.

^{3/} M. A. Halldorson, The Matanuska Valley Colonization Project, Univ. of Colorado, Boulder, Col. (M.A. Thesis, Dept. of Economics), 1936, pp. 32-33.

in the vicinity of Wasilla, outside of the reserve for colonization. Of the colonists' tracts, only about 175 acres were ready for cultivation in May, 1935. ^{4/}

The desirable objectives of a clearance program were outlined early in 1935. Cleared acreage per tract was listed in an estimate of the probable gross income for the average family in each year from 1935 through 1939. ^{5/} In the first year each family was to work half an acre in a community garden. The estimate for the succeeding years was based on the following cleared acres for cropping per farm: $8\frac{1}{2}$ in 1936, $11\frac{1}{2}$ in 1937, $15\frac{1}{2}$ in 1938, and $19\frac{1}{2}$ in 1939. The plan culminated in each family having enough cleared land by 1940 to be self-sufficient and, to start paying off debts. It was unfortunate that the plan was not matched by a similarly detailed program outlining just how and when the cleared acreage was to be increased. Or, it was too bad that action on a plan for clearing had to await work on other phases of colonization.

The clearing of land did not get under way until 1937 (Table 15). Why it did not is explained partly by an administrator's statement in 1935, "One of the first things I heard last spring was that the transient organization was to clear twelve (12) acres of land for each colonist. For reasons well known to you this could not be done. It was a race to get the housing of personnel and livestock finished before winter. This was the problem upon which every effort was expended ... The civic center suffered and was held back for which we are paying at this time." ^{6/} Apparently, several of the colonists were promised cleared land by the selectors and, therefore, did little clearing by themselves. In 1935 they cultivated the 175 acres that were cleared and on the tracts and, also, rented 125 acres of homesteaded land. ^{7/} It has been reported that 450 tons of foodstuffs were raised in the first summer of colonization. ^{8/} In 1936, when the barns and the Community Center were completed, 298 acres of on-tract land were cultivated as well as 225 acres of rented land. ^{9/} By November, 1936, there was an average

^{4/} J. V. Chapman, Memorandum to S. C. Campbell, Palmer, Alaska, April, 1938, p. 3.

^{5/} Alaska Rural Rehabilitation Corporation, File No. 100, op. cit., Probable Gross Income per Average Family based on Acres Cleared (by D. L. Irwin), pp. 1-5.

^{6/} R. L. Sheely, Letter to L. Westbrook, Palmer, Alaska, November 25, 1935, p. 1.

^{7/} J. V. Chapman, op. cit., p. 3.

^{8/} M. A. Halldorson, op. cit., p. 108.

^{9/} J. V. Chapman, op. cit., p. 3.

Table 15.- Acreage of Cleared Land in the Matanuska Valley, Alaska, 1935-1948*

Year	Date		Acres of Cleared Land	
	Month		In Colony	In Valley
1935	May		175	650
1936	June		298	
1936	Nov.		803	
1937	Nov.		1798	
1938	Sept.		2648	
1939	July		3577	
1940	Aug.		4312	
1941	June		4500	5500
1942	June		4900	5900
1943	June		5150	6200
1944	June		5500	6600
1945	June		5800	6800
1946	June		6200	7300
1947	June		6700	8000
1948	June		7000	8500

*Data for years prior to 1941 were computed from ARRC general reports and surveys of individual tracts. Figures for 1941 and more recent years are estimates from field observations, interpretations of aerial photographs, and ARRC operational reports on clearing.

of 4.8 acres cleared and 1.0 acre slashed 10/ on 167 developed tracts. 11/ This average was only about half that hoped for and the Work Credit Program was inaugurated in January 1937.

The Work Credit Program was a plan to stimulate the colonists to improve their farms. The program was a popular one; more than 95 percent of the colonists participated. It allowed for the colonists to be paid in cash by the ARRC for the following: all phases of clearing; completion of houses on the bases of the plans chosen; construction or completion of fences, barns, well houses, and chicken houses; and painting or completion of painting. Maximum allowances or standardized payments were set for all types of approved work. The Work Credit Program was successful. In the three and a half months before it started the vegetative cover on only 140 acres was slashed and put in windrows but

10/ Slashed land is the acreage in which all ground rubbish and brush is moved and stacked by hand and the tops of all trees blown down are cut off and stacked.

11/ Alaska Rural Rehabilitation Corporation, Files on Security and Development Program, Palmer, Alaska.

from January 15 to March 9, 1937 there were 646 acres of land that were completely or partially cleared. ^{12/} Much of the effort was spent on the slashing and bulldozing of easily cleared brush and by October, 1937, when the program ended, there were 1741 acres cleared and 973 slashed in The Colony. ^{13/} The cleared acreage averaged 10.3 per tract and the slashed 5.7. However, it was desired to have a minimum of 15 acres cleared on each tract and the objectives of the Work Credit Program were continued under a new name.

The Security and Development Program was in force from October 1937 to January 1939. The rates of pay for clearing were higher than those in the Work Credit Program and emphasis was clearly on getting more land cleared. By September 1, 1938, there were 138 tracts which had at least 15 acres cleared and the total cleared acreage was 2648. Another 237 acres were cleared by January 1939 when the Security and Development Program was completed successfully. Yet, 15 acres of cleared land per tract was considered insufficient and additional stimulation was felt necessary to raise the goal to 30 acres.

The 30-acre Program began in January 1939. It involved clearing only. Participating colonists signed a Supplemental Land Clearing Contract which required the colonist to do the slashing and the ARRC to have the bulldozing done. All clearing was to be completed by November 15, 1940 when the colonists were to start making payments on their debts. However, a number of difficulties were encountered. Whereas more than 5000 acres should have been cleared at the end of the program there were only 3926 acres cultivable by March 1940, an average of about 23.5 cleared acres for each of the 169 developed tracts, ^{14/} and only about 400 more acres were bulldozed by August of 1941.

One of the difficulties was the development of the colonists' indifference to farming. An administrator reported in July 1939: "Development of tracts is practically at a standstill I can see no reason for this lack of interest in farming and development of tracts except the desire to work on the numerous jobs furnished by the Corporation.... Farming in The Colony has developed to the point where it is second consideration with the Colonists." ^{15/} In addition,

^{12/} A. Anderson, Report on First Month of Work-Credit-System, Palmer, Alaska, March 10, 1937, p. 2.

^{13/} Alaska Rural Rehabilitation Corporation, Files on Security and Development Program, op. cit.

^{14/} Alaska Rural Rehabilitation Corporation, File No. 2923, Agriculture, Palmer, Alaska, Frequency Graph of Cleared Land on March 1, 1940.

^{15/} J. V. Chapman, (Monthly Report on the 30-Acre Program), Palmer, Alaska, July 1, 1939, p. 2.

many of the colonists were becoming worried about making their first payments on debts by farming what cleared land they had. Others preferred to invest in improvements of barns to earn a Grade-A-milk rating. By the spring of 1941 the inevitability of World War II was felt strongly throughout the Territory; the feeling of insecurity that arose was demoralizing to thoughts about new clearing. Aerial photographs show that about 5500 acres were cleared in The Valley in 1941, of which perhaps 4500 acres were in colonists' tracts (Fig. 26). During the war many of the farms in The Colony were operated by women while the men were elsewhere, either doing military service or working at military bases for high wages. The Corporation was encouraging payments on debts and refused to authorize new clearing unless payments or arrangements to pay were made. ^{16/} After the war, from 1945 through 1947, the Corporation made a strong effort to complete its obligations under the Supplementary Land Clearing Contracts. This work was nearly finished in the summer of 1948. By that time, there were an estimated 8500 cleared acres in The Valley and in addition to the Corporation there were three private operators who did clearing work in the area.

In 1948, also, the distribution of cleared land was similar to the pattern in 1941. The major concentration of cleared land was on the flat lands to the north and south of Palmer and around Bodenbug Butte (Fig. 26). A minor concentration was on the flat and gently sloping lands about two miles northwest of Matanuska Junction. The additional clearance between 1941 and 1948 was primarily the expansion of cleared acreages in colonists' tracts that were developed in 1941. Newly cleared land on homesteaded and purchased parcels was scattered but there were tendencies towards concentration within about four miles of Wasilla and on the western and lower slopes of Lazy Mountain which is east of Palmer.

Speed was essential in clearing land for the colonists. To this end the homesteaders' methods of clearing by hand were discarded in 1935 ^{17/} in favor of power-driven machinery. However, the first tractors sent to the ARRC were too light for most clearing operations and the trees' root systems were felt to be too wide and shallow for the effective use of a stumping machine. By 1937 heavier bulldozing tractors were in use (Fig. 27). With these machines trees and brush were butted over, torn out of the ground, and pushed along the surface into windrows. Unfortunately, the top few inches of organic material in the soils also were pushed to the windrows by this procedure (Fig. 28). Too, in the rush to get the land cleared less attention than necessary has been paid to the maintenance of windbreaks, either on a tract or within the whole area reserved for colonization (Frontispiece).

^{16/} Alaska Rural Rehabilitation Corporation, Annual Report of the General Manager for the Period July 1, 1940 to July 31, 1941, Palmer, Alaska, 1941, p. 4.

^{17/} It was reported in 1935 that it would take a good axeman an average of 10 days to just cut down the trees on one acre of land. Methods of clearing by hand are described in: G. R. Boyd, Clearing Land of Brush and Stumps, U. S. Dept. of Agriculture, Farmers' Bulletin No. 1526, Washington, D. C., (revised) 1936.

any of the colonies were becoming worried about their first year's results. It was pointed out that the colonies were not yet established and that the results of the first year were not yet known. It was also pointed out that the colonies were not yet established and that the results of the first year were not yet known. It was also pointed out that the colonies were not yet established and that the results of the first year were not yet known.

In 1955, the distribution of cleared land was similar to the pattern in 1954. The major concentration of cleared land was on the lands to the north and south of the main road and along the main road. A minor concentration was on the east and west sides of the main road. The cleared land was used for agriculture. It was also pointed out that the colonies were not yet established and that the results of the first year were not yet known.

Spaced was essential in clearing land for the colonies. The major concentration of cleared land was on the lands to the north and south of the main road and along the main road. A minor concentration was on the east and west sides of the main road. The cleared land was used for agriculture. It was also pointed out that the colonies were not yet established and that the results of the first year were not yet known.

It was proposed in 1955 that if certain steps were taken in 1956, it was proposed in 1955 that if certain steps were taken in 1956, it was proposed in 1955 that if certain steps were taken in 1956. It was also pointed out that the colonies were not yet established and that the results of the first year were not yet known.

MATANUSKA VALLEY, ALASKA - CLEARED LAND, 1941

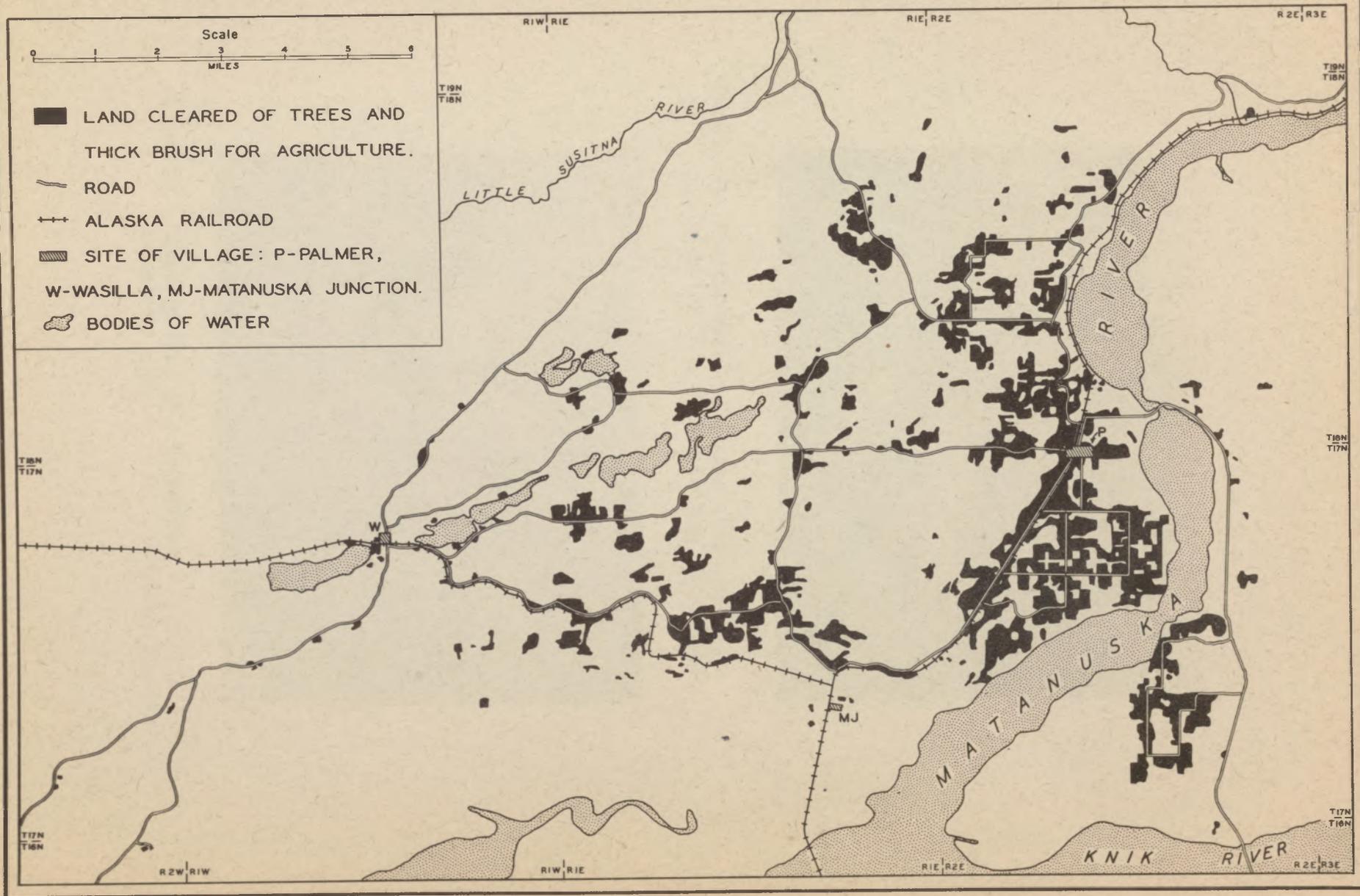


Figure 26

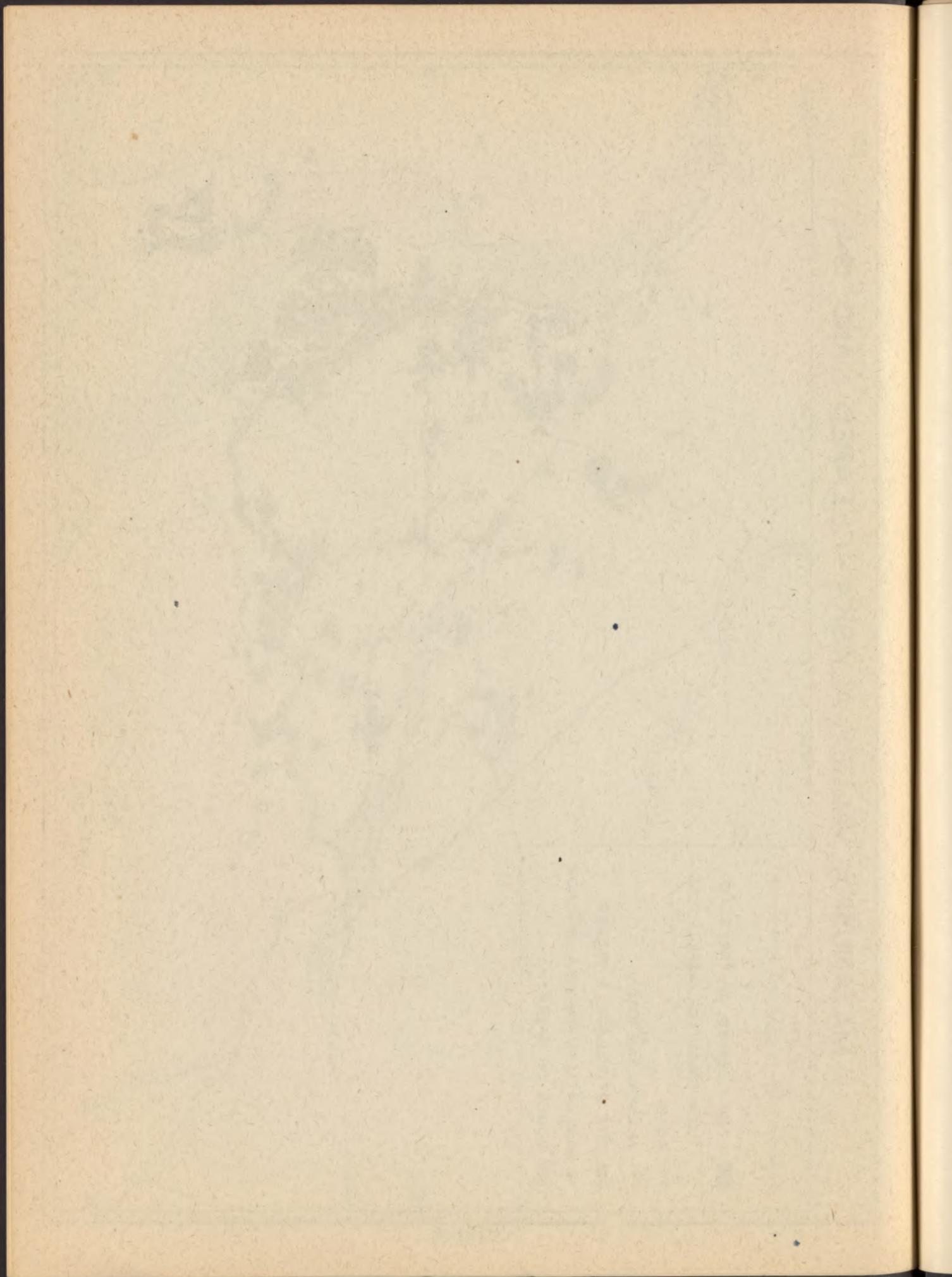




Figure 27.- Tractor with bulldozing blade for clearing land in The Valley, July, 1941.



Figure 28.- Close-up view of a Matanuskan colonist's stump row; summer, 1936. (Courtesy of ARRC).

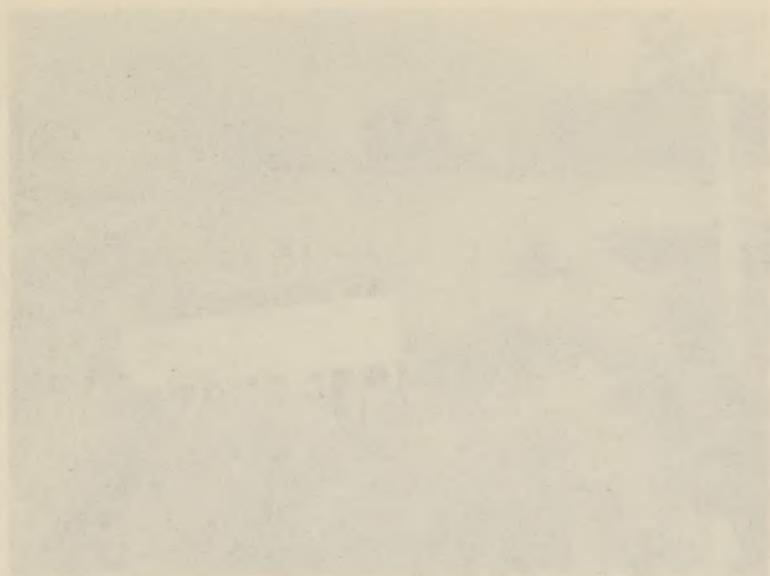


Figure 27 - Tractor with bulldozing blade for clearing land in the Valley, July, 1941.

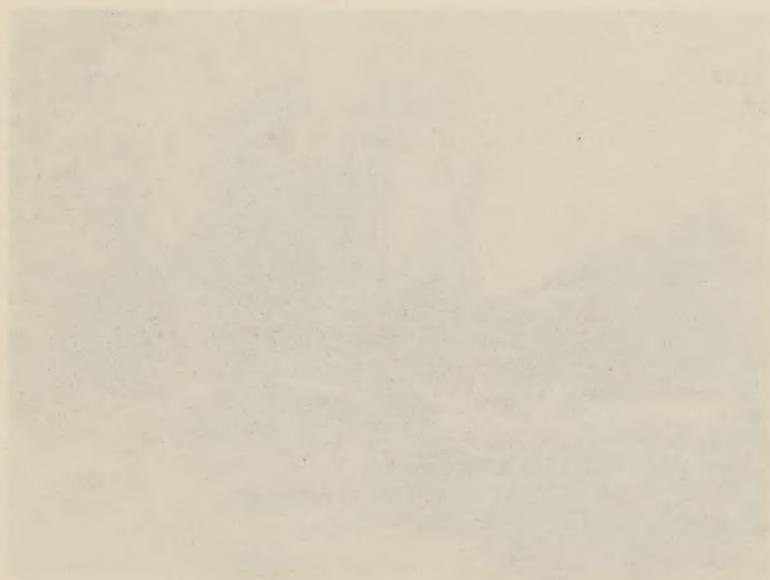


Figure 28 - Close-up view of a Helianthus colostianus' stump cut, summer, 1936. (Courtesy of ARS)

Once the windrows were formed, burning was started. Burning the rows of rubbish, under the supervision of personnel from the Alaska Fire Control Service, was encouraged because the stump rows covered from 15 to 25 percent of the acreage cleared (Fig. 29). However, the colonists found the process was slow. Green timber mixed with soil and moss burned slowly. Thus, the method of clearing was modified to a procedure now considered an advisable one in much of the forested portion of Alaska. Timber for construction, fuel, and mine props is cut with high stumps being left. Waste material is placed in scattered and staggered piles and burned under supervision when it is dry. Stumps are tipped and jarred free from the soil; they are left in this position for a season to dry. Then they are placed on the remainder of the brush piles and are burned under supervision. The process is slower than that used at first in The Colony and adds to the duties of the Alaska Fire Control Service guards but it preserves the organic matter in the soil, affords time for the soil and rubbish to dry out before cropping, and permits more rapid disposal in the stage of burning.

One of the more costly phases of colonization was clearing. It probably cost more than \$500,000. The exact cost is unknown and can not be computed from the records available for this study. Known partial expenditures indicate that much more was spent for clearing than was budgeted by the planners (Table 16). The original budget included an allowance of \$720 per tract, or a total of \$144,000; this was to be expended for clearing 20 acres per farm at \$36 each acre between the second and fifth years of colonization. ^{18/} In the three programs used to stimulate clearing the planned rate, and higher ones agreed to by the colonists, were used. However, a complete tabulation of total costs of clearing is not presented because the amounts of at least three types of expense can not be determined. These are: 1) clearing costs finally assumed by the colonists after the Debt Settlement Program and the cancellation of second chattel mortgage notes for clearing, both of which actions were taken by the Corporation in 1937; 2) cash payments for clearance; and 3) the additional cost of clearance to the ARRC for work under the Supplementary Land Clearing Contracts as a result of the work being done in recent years when expenses were higher than those estimated for the completion of the work by 1940 (Table 16).

Expenses for clearing in The Colony were underestimated for at least five reasons. 1) At least 50 colonists were told by the selectors that 12 acres of land on each tract would be cleared for them when they arrived or during the first year. Administrators felt, late in 1935, that not more than 75 families would remain in The Colony if the land was not cleared for the colonists and that even if the Corporation was not legally liable to clear the 12 acres the agency would have to do so for economic reasons. These attitudes undoubtedly led to a tempering of the costs of clearing charged to colonists. 2) Budgeted clearing costs

^{18/} Alaska Rural Rehabilitation Corporation, File No. 100, op. cit., Estimated Cost of Colonization, p. 1.

Table 16.- Partial Cost of Clearing Land in the Matanuska Colony June 1, 1935, to October 31, 1942

<u>Item</u>	<u>Amount</u>
Land clearing costs absorbed by ARRC due to excess of actual cost over estimates used for charges to colonists	\$269,549.89
Allowances made to colonists in Debt Settlement Program for voluntary clearing by them and for acreages of hilly land, shallow soil, etc.	116,430.66
Second chattel mortgage notes for land clearing (absorbed by the ARRC through cancellation in Dec. 1937)	38,335.06
Valuations of Supplementary Land Clearing Contracts (28 colonists)	19,338.54
Subtotal	\$443,654.15
Land clearing costs included in colonists' original Real Estate Contracts	Unknown
Land clearing costs paid for with cash	Unknown
Land clearing costs absorbed by ARRC due to excess of actual cost of work under Supplementary Land Clearing Contracts over estimates used in preparation of the contracts	Unknown

were set low in comparison with the estimates from the Experiment Station in 1918 and later. 3) The tractors used at first were too light and too few and, therefore, were expensive to use for clearing. A heavy HD-10 tractor with blade was not obtained by the Corporation until March 1941. 4) The late start of clearing operations prompted costly attempts to speed up the action. 5) The lack of completion of the ARRC's work under the supplemental contracts in the years for which the estimates of cost were made. It was noted in a recent report that the ARRC's operation of heavy equipment, which was mostly for the supplemental clearing, was the



Figure 29.- Matanuskan Stump Rows; two miles south of Palmer; Sept. 1939. Vertical air view; scale, three inches equals one mile. Stump rows are gray lines within fields; forested areas are mottled dark gray. (Courtesy of Soil Conservation Service).

major reason for the Corporation having an annual deficit.^{19/} It is advisable to repeat here that criticism in retrospect is easy and that the reasons given above are not offered as criticism of the active planners of The Colony. However, planners of new group settlement can profit from oversights attributed to planners of The Colony by noting the reasons enumerated above and by strongly requesting sufficient time to make adequate plans.

The development of cropping was dependent, of course, on the clearing of the land. However, farming lagged even after land which could be plowed was available and in spite of the administrators stressing the eventuality of the colonists depending on the soil for their livelihood. The lag was the result of many of the colonists being inexperienced farmers or becoming discouraged with the high costs of colonization. In addition, the growing conditions were unfamiliar to and poorly known by the colonists. It may be significant that even at the present time few of the people in The Valley are full-time farmers even though the area includes the largest block of cropped and cleared land in Alaska.

That many of the original colonists were not "honest-to-God farmers" was pointed out previously (Chapter 5). Sets of farming equipment were loaned by the Corporation to districts in The Colony but it is said that some of the original colonists could not operate the machinery. Too, one might state that colonists who were lured easily to non-farming work were not true farmers. Probably the former should not have been selected. With respect to those lured away from farming, it should be remembered that some went to more lucrative occupations while others became disturbed over high costs of living and the rapid rise of their debts above the figure given them at the time of selection.

The colonists found some of the growing conditions unfamiliar and difficult for farming. Climatically, The Valley has modified marine characteristics while the western Great Lakes states have a continental type of climate. In The Valley summers are warm and short, winters are moderately cold and long, and the yearly precipitation is low (Chapter 1, pp. 6-7).^{20/} The distribution of rainfall during the growing season -- low at planting time and high in the harvesting period -- handicaps farming operations and to the colonists appeared "backward" at first (Table 17). In some years crops have been replanted three times before germination took place and at other times it has been difficult to get hay and grain dried. Locally, the total rainfall in a growing season differs considerably (Table 17). This, coupled with variations

^{19/} C. W. Peters, Annual Report, Alaska Rural Rehabilitation Corporation, Fiscal Year Ended June 30, 1948, op. cit., p. 5.

^{20/} J. R. Heller, The Climate of the Matanuska Valley, U. S. Weather Bureau, Anchorage, Alaska, November, 1944, mimeo. U. S. Army Air Forces, Climatic Atlas for Alaska, Report No. 444 (and supplement), Washington, D. C., September, 1943.

Table 17.- Normal Inches of Rainfall during Growing Season in Matanuska Valley, Alaska, to 1946*

<u>Month</u>	<u>Station**</u>				
	<u>No. 2</u>	<u>No. 9</u>	<u>No. 12</u>	<u>No. 14</u>	<u>No. 15</u>
May	0.65	--	0.90	0.78	0.95
June	1.08	--	1.46	1.21	1.47
July	1.55	1.55	1.82	1.96	1.41
August	2.98	5.12	3.57	2.91	4.45
September	2.26	3.17	2.75	2.59	3.07
Total, May through September	8.52	--	10.50	9.40	11.35
Number of Years of Observation	5	3	5	26	3

*Computed from data in U. S. Dept. of Commerce, Weather Bureau, Climatological Data, Alaska Section, (Year 1946), Portland, Oregon, 1947, p. 75.

**Station locations are: No. 2 at the west side of Bodenbug Butte, No. 9 about seven miles northwest of Palmer, No. 12 in northern Palmer and near the Matanuska River, No. 14 at the Agricultural Experiment Station, and No. 15 four miles west and one and a half miles north of Palmer.

in the natural drainage of different soils, makes advisable the employment of various methods to retain or release moisture from the surface. Winds, which are particularly strong in winter, erode severely the light soil; 21/ fall plowing is inadvisable because the thin snow cover does not protect the soils from the strong winds. In winter, too, sheets of ice often are formed on the surface of the snow or ground by alternate

21/ R. Tuck, Loess of the Matanuska Valley, Journal of Geology, v. 46, 1938, pp. 647-653.

thawing and freezing. This natural process, called "glaciating", ^{22/} apparently smothers many perennial crops and, therefore, has been an obstacle to farming.

Troublesome, too, are the differences in growing seasons from year to year at a station and within the same year at nearby stations (Table 18). Such variations are similar to those in the colonists' home states ^{23/} but the differences, coupled with the distribution of rainfall, apparently are felt more in The Valley. For examples, in September 1944 was reported, "Abnormally cool weather for so early in the season with frosts and freezing temperatures resulted in considerable damage to unharvested crops in the Matanuska Valley at the beginning of the month." ^{24/} and in June 1945, "Persistent cool, cloudy weather in Matanuska ... (Valley) seriously retarded crop growth." ^{25/} The average growing season is 115 days; it is 123 days for hardy crops and 105 days for tender crops.

Such climatic data are essential for farming. Yet, when the colonists went to The Valley its climate was but partly known. Only since 1942 have local variations been recorded, too short a period for safe generalization. Much more observation of all climatic elements in the area still is needed for farming.

To farm successfully the colonists needed, and still require, other information. Not until 1939 were the pastures in nearby mountains mapped and the carrying capacities determined to be 6 to 7 cattle per 100 acres for the summer season. ^{26/} The distribution and characteristics of the types of soil in The Valley were not published until 1946 (Chapter 4) and chemical analyses are required to determine proper types of fertilizers. ^{27/} The relations of soil temperatures to yields of crops are unknown. Research on adaptable types of crops and methods of drainage has proceeded as rapidly as funds were available but more of such work would be useful to farmers in The Valley and in the Territory. The management of and income from farms was analyzed in part in 1937 ^{28/} and was not started again until 1948. ^{29/} In 1949 a long-

^{22/} W. A. Rockie, Physical Land Conditions in the Matanuska Valley, op. cit., p. 10.

^{23/} U. S. Dept. of Agriculture, Climate and Man, Yearbook of Agriculture, Washington, D. C., 1941, pp. 914-917, 922, 925-927, 932, 1191-1193, and 1198.

^{24/} U. S. Dept. of Commerce, Weather Bureau, Climatological Data, Alaska Section, (Year 1944), Portland, Oregon, 1945, p. 73.

^{25/} Ibid., (Year 1945), 1946, p. 73.

^{26/} L. J. Palmer, op. cit., passim.

^{27/} Systematic work on various characteristics of The Valley's soils was begun in 1948 by a resident soil scientist in the Agricultural Research Administration for Alaska.

^{28/} J. T. Flakne, (Matanuska Valley Farm Income Survey), Palmer, Alaska, May, 1937.

^{29/} U. S. Dept. of Agriculture, Bureau of Agricultural Economics, Farm Management Study, Matanuska and Tanana Valleys and Kenai Peninsula, 1947, Washington, D. C., January, 1949, (Preliminary Draft).

Table 18.- Fluctuations in Growing Seasons in the Matanuska Valley, Alaska, 1942-1946*

	<u>1942</u>	<u>1943</u>	<u>1944</u>	<u>1945</u>	<u>1946</u>
Length (Days)					
Station					
No. 2	129	132	89	98	119
No. 9	104	--	90	86	73
No. 12	133	165	115	122	137
No. 14	133	150	91	116	73
No. 15	--	132	90	94	73
Date of Beginning					
Station					
No. 2	May 9	May 24	June 4	June 1	May 25
No. 9	--	--	June 4	June 5	June 2
No. 12	May 5	May 9	May 9	May 8	May 8
No. 14	May 5	May 24	June 3	May 14	June 2
No. 15	--	May 24	June 4	June 5	June 2
Date of End					
Station					
No. 2	Sept.15	Oct. 3	Sept.1	Sept.7	Sept.21
No. 9	--	Sept.17	Sept.2	Aug.30	Aug.14
No. 12	Sept.15	Oct.21	Sept.1	Sept.7	Sept.22
No. 14	Sept.15	Oct.21	Sept.2	Sept.7	Aug.14
No. 15	--	Oct. 3	Sept.2	Sept.7	Aug.14

*Figures for 1943 are based on killing frosts and for other years on freezing temperatures. Data from U. S. Dept. of Commerce, Weather Bureau, Climatological Data, Alaska Section, (years 1942-1946), Portland, Oregon, 1943-1947, passim.

awaited professional survey of markets for products from The Valley is to be started. In general, farming practices commonly used in the United States are not adaptable to the Matanuska Valley and many other parts of Alaska. Just as farming developed slowly in The Valley in part because growing conditions were little known so is permanent agriculture likely to expand slowly, and perhaps faultily, in new group settlements elsewhere in the Territory for which data are scanty.

The growth of farming after colonization began was marked by two agricultural changes in The Valley. These were the developments from nearly subsistence agriculture to a commercial type and from general

farming to specialization in dairying and truck crops. The homesteaders' farming was primarily the subsistence type, based on garden crops for use at home, hay and grain for the support of cattle and horses, and potatoes for their own use and for sale. At first, the colonists also were subsistence farmers. However, when cleared land began to be available the tracts were turned quickly into sources of subsistence and cash income. The tendency towards commercial farming has continued in the past 10 years, particularly with the rapid increase of the civilian and military populations in Anchorage. However, the wages for construction made necessary by these increases of population lured colonists from The Valley and slowed down the development in general there.

It was expected that the colonists would become specialized farmers. They were to be self-sufficient general farmers with bases for specializing in truck crops or dairying by the end of 1939, according to estimates. ^{30/} The results of a survey made in 1940, by employees of the Corporation, show that general farming was predominant and that specialization was starting. Of the 118 tracts being farmed in 1940, they were classified as follows: 83 general farms, 9 dairy farms (Fig. 30), 6 truck farms (Fig. 31), 2 poultry farms, 1 sheep farm, and 17 unclassified farms. ^{31/} Since 1940, dairying has continued to grow in importance and by 1948 there were 38 Grade A dairy farms in The Valley. Truck farming has increased, also, but slowly to prevent serious glutting of the markets at times of harvest. However, full-time farming is below the hopes of The Colony's original planners. It has been estimated that perhaps 50 farmers, mostly dairymen, are full-time operators. ^{32/} The remaining farmers derive part of their incomes by working for Federal or Territorial agencies and as individual contractors.

The Valley's agriculture is permanent and is growing slowly. However, farming in the area is still too new to make complete detailed land-use analyses at present or to forecast future conditions. At the beginning of The Colony commercial agriculture was subsidized by the Corporation. Then came World War II when demands for farm products were great and prices high. In both periods agriculture was supported by artificial means and changes were rapid. There is evidence that more changes in farming are at hand with a probable slow increase in the acreage of cleared land, in the number of full-time farmers, and with increased knowledge about growing conditions in The Valley. In general, the future

^{30/} Alaska Rural Rehabilitation Corporation, File No. 100, op. cit., Probable Gross Income per Average Family Based on Acreage Cleared.

^{31/} Computed from reports on each tract which are assembled and in the working files of the General Manager of the Alaska Rural Rehabilitation Corporation in Palmer.

^{32/} C. W. Peters, Annual Report, Alaska Rural Rehabilitation Corporation, Fiscal Year Ended June 30, 1948, op. cit., p. 6.

is promising. There is room in the area for a small number of new farms, perhaps 25 to 50 parcels of 40 and 80 acres each. The more common field crops and vegetables in the northern United States can be grown successfully in The Valley, excepting corn, alfalfa, and tender vegetables. ^{33/} Yields of crops are relatively high. ^{34/} And, Anchorage, with an estimated population in 1948 of 15,000—20,000, continues to grow.

In planning for new group settlement in Alaska the importance of clearing the land can hardly be overestimated. Nor can that of collecting and analyzing data with respect to cropping the land after it is cleared. The unanticipated expenses, sacrifices, and discouragement during the development of farming in the Matanuska Colony are testimonies for the necessity of careful planning for agriculture. Success should not depend upon just hard work by the settlers but, also, upon good judgment — the latter requires facts. Even for The Valley, one of Alaska's better agricultural areas, one of the Territory's more observant agricultural administrators said in 1945, "Although soils are still fertile and average crop yields are high, and while markets and prices are good, there are disadvantages such as short growing seasons, heavy rains at harvest time, high winter winds, long winters, and the danger of over-production and low prices, if agriculture is developed too rapidly and beyond market requirements." ^{35/}

^{33/} A detailed list of crops grown successfully in The Valley is given in: W. A. Rockie, A Picture of Matanuska, op. cit., p. 358.

^{34/} Average yields per acre are: Oats 45 bushels, hulless barley 23 bushels, potatoes 5 tons, Chogot wheat 22 bushels, oat-pea hay $1\frac{1}{2}$ tons, and oat-pea silage 6-8 tons. For more complete descriptions of yields and other features of agriculture in The Valley see: G. W. Casser, The Matanuska Valley, Circular No. 3, Alaska Agriculture, Alaska Development Board, Juneau, Alaska, January, 1946. D. L. Irwin, Agriculture in the Matanuska Valley of Alaska, The Scientific Monthly, v. LX, March, 1945, pp. 203-212. National Resources Planning Board, Wartime Agricultural Production In Alaska, Juneau, Alaska, April, 1942, mss. H. C. Hanson, U. S. Dept. of the Interior, Division of Territories and Island Possessions, Agriculture in the Matanuska Valley, Alaska, Washington, D. C., 1943.

^{35/} D. L. Irwin, ibid., p. 212.

Figure 30.-A Matanuska Colonist's Dairy Farm;
June, 1941.



Figure 31.-A Matanuska Colonist's Truck Farm;
August, 1941.

Chapter 11

RECAPITULATION

The Matanuska Valley Colony has been an effective and generally successful experiment to increase permanent settlement in the Territory. In 1934 The Valley was a partly broken and isolated wilderness. At that time it was populated by about 500 people who did some farming in conjunction with mining, fishing, hunting, and trapping. In 13 years the eastern half of The Valley has become a widely broken and accessible forested area. In addition, The Valley has a population of 2500--3000 people who are participating in a growing farming economy and who work at various non-agricultural occupations. These changes have been made in an area of diversity that borders the northern limits of the inhabited Western world and they show that additional settlement is feasible there.

It is the methods by which the changes were made that can be improved greatly. Weaknesses in the methods used in The Colony have been disclosed by geographical and financial analyses. In most cases, ineffective action had its origin in the speed required in the planning phase. The Matanuskan experiences and weaknesses are summarized topically below to underscore the necessity of careful and deliberate thinking about new Alaskan group settlement.

Planning. Plans for The Colony were made hurriedly. The project was too complex to design and start action in the six months between late 1934 and early 1935. Even more significant was the nearly complete lack of basic studies on the Matanuska Valley and summaries of experiences in group settlement elsewhere in the world. These two weaknesses -- speed and lack of information -- were demonstrated throughout all phases of colonization.

Administration. The Alaska Rural Rehabilitation Corporation, a private non-profit agency which was formed for the purpose, has guided the colonization. However, the use of the California Emergency Relief Administration until the ARRC was formed led to confusion. Too many administrators, in both Washington and Palmer, were inexperienced. Administration often was paternalistic and the control too rigid.

Land. The Colony was developed on about 13,000 acres of better farming land in The Valley. All of the acreage was purchased by the ARRC and 17 percent remains unassigned. The

40-acre tracts were too small and the physical qualities of the land were too little known.

Settlers. The original colonists were 903 disadvantaged persons, nearly all of whom were from Michigan, Minnesota, and Wisconsin. Selection was hurried and resulted in the choice of too many people who were not sufficiently adaptable or experienced in farming to remain in The Colony.

Money. About \$5,400,000 was granted for the colonization. The sum was nearly five times the estimated figure but at least 40 percent of it is still present in credits. Funds were spent hurriedly and were accounted for poorly. Direct and indirect grants to colonists were large.

Transportation Facilities. Only the Alaska Railroad and an open network of graveled roads were present at the start of The Colony. Improvement and extension of the roads concurrently with settlement produced confusion. Practically no facilities for transportation by aircraft were available.

Farm Building Program. Practically all housing had to be built and all wells drilled when The Colony began. Construction was poorly timed and control of the distribution of materials was weak. There was too little flexibility in plans for buildings. Many structures were poorly built and wells were expensive to drill because of lack of information on the water table.

Community Facilities. No facilities were present for servicing the colonists when they arrived. The construction of a complete village was poorly timed. Facilities were more than adequate at first. The Matanuska Valley Farmers Cooperating Association was forced on the colonists.

Clearing and Cropping. About 175 acres of the colonists' tracts were already cleared when the colonists arrived. Clearing and farming started late and progressed slowly. Many colonists were too inexperienced to farm under unfamiliar and partly unknown agricultural and marketing conditions. However, by 1948 there were about 8500 acres of cleared land. Farming, though much was part-time, had become permanent.

The settlement of Alaska is a desirable objective. An attitude that additional settlement should be rapid and on a large scale is not defensible. What is needed first is at least one year of objective appraisal and planning and at least two years of intensive scientific investigation. Additional time will be necessary to formulate plans

carefully. Seven areas have been suggested as suitable for group settlement. What is known about each of these areas is little more than, if as much as, was known about the Matanuska Valley when The Colony was started there. The experiences of colonizing The Valley prove that to the old slogan, "Let's settle Alaska" must be added the even older saying "Haste makes waste".

The selected references listed below are divided into three groups: 1) Alaska Bibliographies, 2) Historical Information and Statistics on specific data on the Valley, 3) General information on the Valley, and 4) Maps of the Valley or of larger areas including the Valley.

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PLATE IV

PLATE IV

PLATE IV

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The selected references listed below are divided into five groups:
A) Alaskan Bibliographies, B) Published References including general or specific data on The Valley, C) Unpublished References including general or specific data on The Valley, D) Aerial Photographs of The Valley, and E) Maps of The Valley or of larger areas including The Valley.

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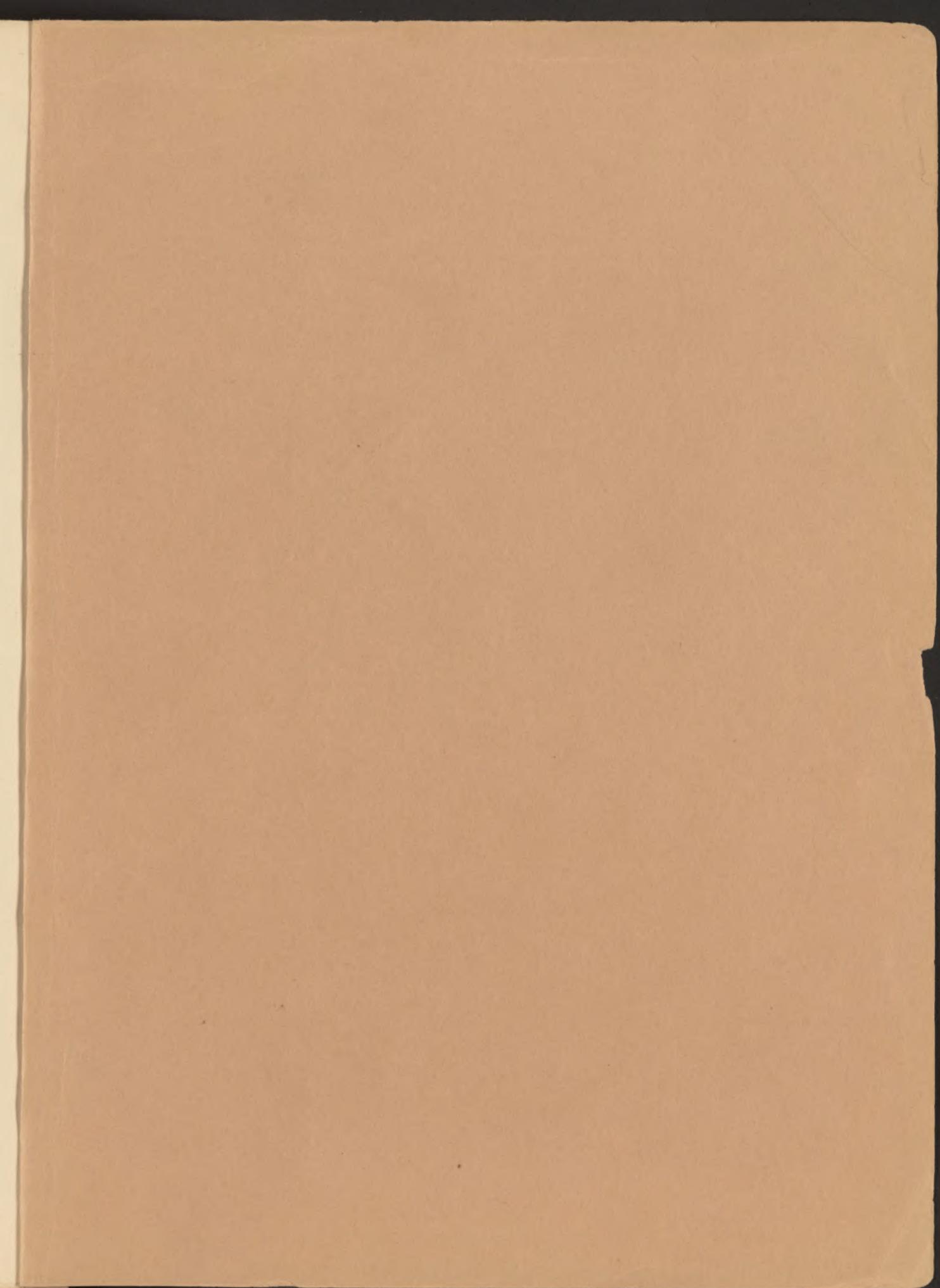
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