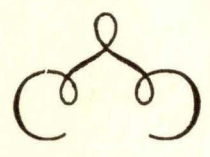


H. A. Johnson

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MATANUSKA VALLEY MEMOIR



Alaska Experiment Station

Palmer, Alaska

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The Story of How One Alaskan Community Developed

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PREFACE

The Matanuska Valley was created through action of ice, water and wind. When the last glaciers retreated up the Susitna, the Knik and the Matanuska valleys, vegetation began covering the scars. Over several centuries a dense growth of trees and brush screened the land from Knik Arm to the mountain slopes of the Talkeetna range. Here and there a lake broke the uniform forest mantle. A salt marsh at the mouth of the Matanuska River kept the rank undergrowth from reaching tidewater. A few low spots near the Little Susitna and other swampy areas supported a thick cover of moss or grass.

The Valley, which really isn't a valley at all but a reworked foreland, rises from the Matanuska River in a series of benches ranging in width from a few hundred feet to more than a mile. Some areas are flat, others are rolling. Soil depth varies from eight feet in thickness for the region bordering the Matanuska River to a few inches in sections west of Wasilla. The soil mantle, of windblown loessial materials, is of relatively new geologic development. The Valley is bounded by the Chugach Mountains on the east, the Talkeetnas on the north, the Susitna Valley on the west and Knik Arm on the south. Winters are long but usually not unduly severe; summers cool and relatively moist.

To this country came trappers, prospectors and traders in closing years of the nineteenth century. Hordes of insects, difficult trails, sparse population and great distances from supply points discouraged many potential residents. Those who stayed were interested primarily in the Willow Creek gold field or the Matanuska coal deposits.

Another generation, an uneasy international situation and social crises within the United States were required before the Matanuska Valley and the rest of Upper Cook Inlet were ripe for use. This history of the Valley is designed to trace the many human elements affecting the ebb and flow of agricultural development here. It brings into focus many problems that must be solved before new areas in Alaska can be settled satisfactorily.

PREFACE

ACKNOWLEDGEMENTS

No one person ever makes history. No one person ever can document the history of a nation, an area or a community. Too many facets and facts exist.

We acknowledge indebtedness to the historians and developers of Alaska who preceded us and provided much of the information we have compiled into our account of the birth of a community. Many "old timers" from the Valley provided valuable insight into situations they had experienced. Mr. Roland Snodgrass, Mrs. June Murphy and Miss Dolores Pommier assisted in compilation and preparation of background data. Mr. James Hurley made available to us the ARRC unpublished files for compilation of certain data. Various public officials aided us in many ways as we worked our way through recorded history. Several old photos were contributed by Mr. Walter Teeland of Wasilla and Mr. Don L. Irwin of Palmer. Several persons in public and private life who know Alaskan conditions have reviewed the manuscript and suggested improvements.

Special acknowledgement is due Don L. Irwin, Director of the Alaska Agricultural Experiment Station. His vision and foresight were largely responsible for the undertaking. His encouragement and advice bolstered our lagging spirits before the long task was completed. He has read each chapter critically and has assisted particularly with interpretation of materials since 1935.

Our appreciation is extended to each and all for their valuable assistance.

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PART I - EARLY HISTORY

Chapter I - The Russian Era, 1741 - 1867

The year was 1741. It was August. A definite chill was in the air as Vitus Bering and his crew sailed slowly northward along the unknown Alaskan coast. Mount St. Elias, with its towering snow-covered peak, lay astern; rain and fog obscured the shoreline.

Their few glimpses of the North American coast were of a rugged inhospitable land. Up many deeply indented bays towering glaciers cascaded thunderous avalanches into the sea. Snow-capped mountains formed an awesome, impenetrable backdrop.

Captain Bering was not looking for lands to settle but was seeking easily gathered wealth. He sighted land off Cook Inlet late in July 1741.¹ In his hurry to get home to Russia before the winter storms, he sailed on westward and missed his chance to discover the area that 200 years later was to become the heart of Alaska.

Adventurous Russian fur gatherers, called promyshlenniki, approached mainland Alaska island by island from the west in their search for seal, sea otter, silver fox and other valuable furs. They discovered the Aleutian Islands, Bristol Bay, the Alaska Peninsula, Kodiak Island and made short forays as far north as Kenai.

A steady stream of rich furs from the fog-shrouded east aroused keen interest among Russian nobility doing business on the Kamchatka Peninsula and in Siberia. Influential families connived to gain control of this rich trade. By the late 1770's several merchants were financing expeditions to the Aleutians. Among these were the Panov Brothers,² the Lebedev-Lastochkin Company and Shelekhov-Golikov Company.²

During this same period English ships occasionally ventured north for trade and exploration. The legendary Northwest Passage provided incentive for many long weary trips. Crews of several ill-fated expeditions were captured by the Coast Indians and sold as slaves or killed depending on the whim and mood of their captors. Alaskan waters had a well-earned reputation for danger.

Captain James Cook first described Cook Inlet above Kenai. On May 20, 1778 as he was sailing past the mouth of Cook Inlet, searching for the Northwest Passage, he noted the tumbling waters of a tiderip.

Assuming this to be the current of a mighty river that possibly would lead to his goal, he turned into the current and sailed hopefully toward the enclosing mountains. Finally, as he approached what is now Fire Island, he noted the evidently impenetrable barrier of mountains which spelled failure for his expedition. Naming this body of water "Turnagain River", he returned south believing he had discovered the mouth of a system of rivers. Although the name "Turnagain" was applied to a "river" only 20 airmiles from the mighty Matanuska or the unique Knik and only across the inlet from the Susitna, it was another 100 years before these names were to appear on maps with any degree of accuracy.

Two of Cook's officers, George Dixon and Nathaniel Portlock, revisited Cook Inlet in 1786. Salvadore Fidalgo, a Spanish navigator, and George Vancouver, another of Cook's officers, sailed into Cook Inlet in 1794. Vancouver completed exploration of the upper ends of Turnagain and Knik Arms but he also failed to discover the mouth of the Susitna.³

Russian speculators involved in the very lucrative Alaskan fur trade were making fabulous profits during this period. Gregory Shelekhov had become one of the wealthiest merchants in Siberia but competition was a serious problem to his company. Hoping to outsmart his competitors and gain a monopoly in the fur trade, he determined to plant a permanent colony in Alaska.

Shelekhov and the forerunners of his colony sailed from Okhotsk on August 16, 1783. They landed on Kodiak Island the following spring and immediately began building their fort at Three Saints Bay. A violent earthquake and tidal wave a few years later caused great loss of life and property damage. The settlement then was moved to Chiniak Bay, the present site of Kodiak.

Shelekhov sent an exploratory party to Cook Inlet from Kodiak in 1785. They found the natives friendly and traded for some furs. Their success and fear of his competitors encouraged Shelekhov to establish three temporary outposts on Cook Inlet before he returned to St. Petersburg. One of these outposts, Fort Alexander of Kuchekmak (Kuchemak later Kachemak) Bay was designed to discourage traders from the South.⁴

Establishment of Fort Alexander, of course, failed to deter competitors. Almost simultaneously with its establishment by Shelekhov, the Lebedev-Lastochkin Company was developing Fort St. George near the mouth of the Kassilov (Kasilof) River.

However, the two rival outposts worked in harmony and another post was established by the Lebedev-Lastochkin Company to cut off the trade

of the Shelekhov-Golikov Company. To this post, which was located near Kenai, was given the name St. Nicolas. From St. Nicolas a reign of terror involving robbery, rape, intimidation and brutality was inaugurated throughout Cook Inlet, the Kenai Peninsula and Prince William Sound that did not end until Baranov took strong action against the leaders.

After Shelekhov's death, Nikolai Rezanov, his son-in-law, secured a charter for exclusive trade in Russian America. This charter, dated 1799, granted the Russian American Company sole rights to Alaskan trade for a period of 20 years. Alexander Baranov was its first manager.

No new settlement was established in the Cook Inlet region until a decree in 1835 provided for establishment of agricultural villages.⁵ Kenai became the center from which traders, priests and explorers traveled to the surrounding country. Shortly after this date Russian Orthodox priests built a church on the shores of Knik Arm near the mouth of the Knik River.

During the time of Baranov, agriculture was attempted without success at Yakutat. Cattle were introduced on Kodiak Island and the Kenai Peninsula by the Russians and gardens of sorts were maintained at permanent stations.⁶ The promyshlenniki and Siberian serfs were not suited to or interested in that type of work. No one in authority knew where to find land suited to agriculture or what to do with it if they had found it. They knew nothing about cropping systems and livestock. The serfs sent to them as farm labor usually were completely unskilled, frightened and disheartened. Lacking leadership, they made little effort to learn survival methods. The remoteness and wildness of the country quickly discouraged those who attempted agriculture.

The Russian American Company never seriously carried out agricultural projects because it was never thought that farming would produce enough to supply the population in Russian America. Fort Ross, California, was the only Russian settlement that supplied Russian America with foodstuffs in any quantity.

Ninilchik, a small fishing village below Kenai, is the only settlement remaining of those founded as agricultural stations. On the west side of Cook Inlet near Kustaten, some fields were cultivated under the supervision of the Russians.⁷ Tyonek and Iliamna were fur purchasing points.⁸ During this period of Russian activity, the Matanuska Valley was left untouched.

P. P. Doroshin, a Russian mining engineer, discovered gold near Kenai in 1848, but the project was abandoned when the amount of gold extracted proved insufficient to warrant exploitation. Vasili Melakoff explored the Susitna River in 1834 and obtained the first geographic knowledge of that region.⁹ The general courses of the Susitna and of the Matanuska River were shown on maps as early as 1860, but it is doubtful whether the Russians explored their entire lengths. Furs remained the commodity sought. Mining and exploration were of secondary interest.

The Crimean War, halfway around the World, spelled the end of Russian trade and expansion into Alaska. Fearing that her claims in America might fall into British hands, Imperial Russia began negotiations for sale of Alaska to the United States. This deal was not easily consummated--the U. S. Congress was almost completely disinterested in the bargain. Many influential citizens were strongly outspoken in opposition to expansion of territorial holdings.

American whalers had long been in Alaskan waters. Traders, among them employees of John Astor, had sailed up and down the coast of Southeastern Alaska trading with the Thlingits. Fortunes had been made by these early enterprisers and they well knew the riches contained in that vast territory. These men created enough interest to bring pressure on Congress. The treaty which brought Alaska under the American flag was concluded on March 30, 1867. Thus ended Russia's influence in North America and thus began American claims to and possession of lands bordering the Arctic Ocean.

Chapter II - Gold and Coal

In America's westward march the cry of "Gold" was like a trumpet-call. Under its spell men rushed across desert wastes and over almost impassible mountain ranges. It sent them struggling to Alaska over Chilkoot Pass and down the Yukon. It spurred them to battle winter's ice and snow, summer's mosquito hordes, poor food and constant danger. Gold finally thrust Alaska into American consciousness.

The Russians knew about Alaska's gold. Yet their reports sent to St. Petersburg from Russian America mentioned it only casually. They vividly remembered the loss of California by Spain following the gold rush of 1849. The Russians were interested in their valuable fur trade. They were not interested in grubbing into the ground. Their activities increased or decreased with the fur trade.

Since Americans knew little about Alaska's gold, and the fur trade was no longer grossly profitable, it is small wonder that Alaska was neglected after its purchase in 1867. Alaska remained much as it was under the Russians. Some activity centered around Southeastern Alaska during the next twenty years and a few men ventured into the Yukon country. Sealing was jealously controlled by one company and not open to competitive harvest. Beyond that Alaska was ignored. This period of neglect abruptly changed when gold was discovered on the Klondike in 1897. The strike triggered a chain reaction that brought hordes of fortune hunters roaring into the country.

By the following year thousands of men were on their way north. The quickest route to the gold fields was by Skagway and the White Pass trail or by Dyea over the Chilkoot Pass. In summer the Yukon served as a highway.

Those were the major routes. Nevertheless, some men reached Eagle and the Klondike from Valdez at the head of Prince William Sound. Others went up the Matanuska Valley. The Glenn Highway, passing through country both rugged and beautiful, now follows the path taken by those early "stampedeers". H. H. Hicks, who in 1898 acted as guide for Captain Glenn and Lt. Castner, was the first white man known to have visited the headwaters of the Matanuska River.¹

Here, then, begins modern history of the Matanuska Valley. Perhaps the Russian fur gatherers saw the flat lowlands bordering Knik River, but no records remain to tell whether these hardy adventurers ever visited the Upper Cook Inlet area. References to the Matanuska Valley

are contained in the accounts of Captain Cook's voyages to the Pacific,² but over 100 years elapsed before exploration for the Matanuska Valley was documented further.

By the late 1880's some prospectors had reached Cook Inlet and perhaps among these men some wandered into the Matanuska Valley. There is no record that any prospecting was done in this region until 1888 when gold was found on Resurrection Creek near Hope by a man named King.³

Discoveries on Mills and Canyon creeks in 1896 brought the first real rush to Upper Cook Inlet. Thousands of men arrived that year at Tyonek enroute to Turnagain Arm and the Susitna region.⁴ Among those who ascended the Susitna, two men, M. J. Morris and L. Herndon, discovered placers in 1897 and staked claims on Willow Creek near Grubstake Gulch. They took out about \$4,000 from their claims. A. Gilbert staked Grubstake Gulch in 1899, then sold his interests to O. G. Herning in 1900.⁵

Gold mining in the Valley between 1898 and 1906 was entirely by placer. These amounted to crude sluice boxes operated by one or two men. They were relatively inefficient, allowing much of the finer gold to escape with the mud and water. The peak in placer mining was reached in the two years 1904 and 1905.⁶ It declined rapidly thereafter as quartz lodes were developed. Poor paying gravel, lack of dependable water supply and high costs of transportation quickly discouraged placer operators. As a conservative estimate, no more than \$40,000 ever was recovered from placer claims in this area. In 1915, the total amount of gold taken out of the placers was estimated at \$25,000.

The first claims were staked at the mouth of Grubstake Gulch and along Willow Creek. Later claims were located above and below these, at the mouth of Craigie Creek and on Wet Gulch. The Klondike & Boston Company acquired most of these claims in 1900, introduced hydraulic mining, and worked Grubstake Gulch extensively by this method.

On September 16, 1906, Robert Hatcher, who had come to the Matanuska Valley to trap and prospect, located the first gold quartz claim on upper Fishhook Creek. Attention was now focused on quartz deposits lying along the headwaters of streams from Craigie Creek to the Little Susitna.

Lode mining presented problems not found in placer mining. Placers required little capital, but lode mining demanded huge expenditures in development work before gold could be extracted. Although individuals located prospects, actual development of mines remained for organized companies. One of the first doing development work was the Alaska



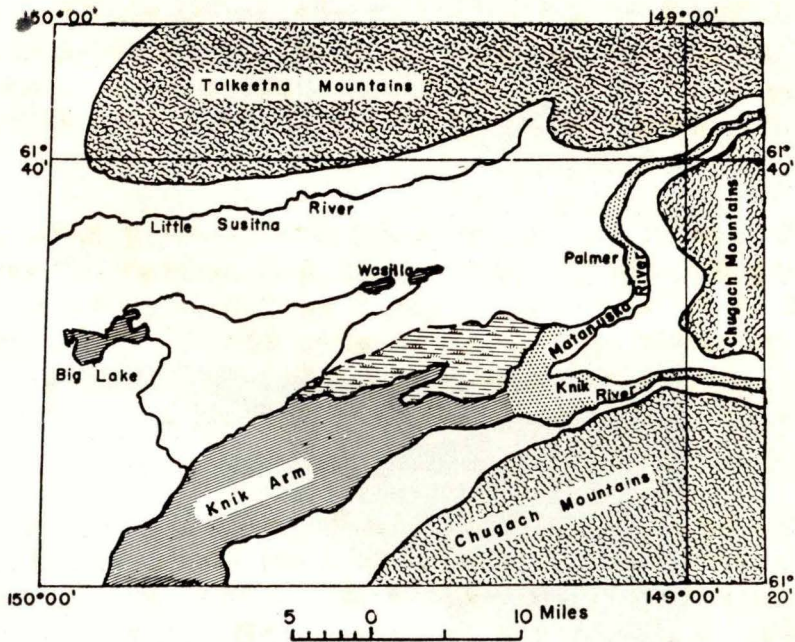
Portion of a hand-drawn map of Central Alaska by O. G. Hering.

George Palmer's Store at Knik about 1900.





Store interior at Knik about 1910.



Matanuska Valley Physiographic Areas

Free Gold Mining Company. It was located just south of Independence Mine. Mines opened by two companies--the Alaska Gold Quartz and the Gold Bullion Mining companies--remained in operation until the United States entered World War II.

Prospecting reached its peak in 1919 when 38 gold mines and prospects were either in production or had been staked, while two copper claims had been recorded.⁷ Activity was concentrated later on developing existing prospects into mines and in improving mines already in production. The average yield for most gold ore was about \$25 per ton. When capital was available in sufficient quantity to allow continued development and improvement, production was correspondingly higher. Sufficient capital was the exception rather than the rule.

In 1933 the price of gold was raised from \$20.67 to \$35 an ounce. This increase served to spur activity in the operating mines and gold mining remained an important industry in the economy of the Valley until World War II. Since 1945, very little work has been done, and at present the mines in the Willow Creek district are not operating.

Although World War II at least temporarily stopped gold mining as one of the basic industries of the Valley, it created a demand for coal and agricultural products which the Valley could supply.

Indians told the early trappers and prospectors about the Matanuska Coal Fields at least as early as 1894.⁸ Some half-hearted prospecting was conducted about 1894-96 but it soon was abandoned. W. C. Mendenhall, geologist with Captain Glenn's Army Department expedition of 1898, made preliminary maps of the Coal Field. These were followed by several years of reconnaissance and mapping by the U. S. Geological Survey.

With this small knowledge and speculative hopes, a group of financiers began constructing the Alaska Central Railroad in 1904. Starting at Seward, its northern terminus was to reach the Tanana River and make connections with boats for the Yukon. It planned to use Matanuska coal in its engines and anticipated a good pay-load for its company. All of this activity and rumor of activity spurred additional extensive prospecting for coal.

The Alaska Central Railroad had laid 52 miles of rails by 1906 before it met financial adversities. Sudden withdrawal of the coal lands by the U. S. government effectively stopped the ACRR and discouraged further prospecting. For the next six years the coal fields lay untouched.

In 1909 the ACRR was reorganized and named the Alaska Northern Railroad. With no tangible destination and no prospective pay load making it worthwhile to get there, the ANRR suspended construction after reaching Kern Creek, 72 miles from Seward.

Interest in the Matanuska coal fields was renewed when Alaska became a territory in 1912. The Navy wanted a source of coal from which it could refuel the Pacific Fleet without having to return to the United States. Because of this interest, they began investigating Alaskan coal fields, especially the Bering River and the Matanuska deposits. During 1913, tests on the USS Maryland based on 1,100 tons of highgrade bituminous Matanuska coal from Chickaloon were entirely satisfactory for Naval purposes.⁹ However, no other coal was taken out for use by the Navy and the operation was discontinued until the government railroad was built through the Valley.

Construction of the government railroad after 1915 was the greatest factor in development of the Matanuska coal field. By 1917 the main line was built through the Valley and a branch was constructed to Chickaloon. The first step in the construction of the railroad had been purchase by the government of the Alaska Northern RR. Next was the founding of Anchorage in 1915. From here, the line was extended north to Nenana and south to connect with the existing line at Kern Creek. Matanuska and Wasilla came into existence because of the railroad.

Congress finally passed a law in 1914 which allowed leasing of coal lands. The first units were laid out in 1915 and the first leases were granted in 1916. One mine, the Doherty on Moose Creek, 3/4 of a mile from the railroad right-of-way, produced 8,000 tons that year. This represents the first coal ever mined for sale in the Matanuska Valley by private individuals.¹⁰ The following year miners, principally in three mines, produced 45,370 tons of coal valued at \$238,000. Eska, Chickaloon and Baxter mines were operated in 1918, yielding 63,092 tons of coal valued at \$368,318. For the next two years, only the two government mines at Eska and Chickaloon were in operation. They hired about 120 men during this period.

Private capital again invaded the field in 1920 when Evan Jones began his mine. Construction also was begun on a washery at Sutton. The two government mines continued producing coal and some prospecting was done on Coal Creek by the Navy. Approximately 150 men were employed in this work earning \$8.60 a day for skilled work and \$7.90 for unskilled work underground. The cost of mining was rather high running about \$6 a ton.¹¹

Extensive development by private enterprise began in 1921 when 53,088 tons were mined mostly from Eska, Chickaloon and Coal Creek. About 250 men were now employed in the Matanuska coal field. In 1922, the washery, when put in operation, was of faulty construction and was partly dismantled. A fire at the Evan Jones hindered operations for part of the year.

During the next two years, four mines were usually in operation producing coal under contract with the Alaska Railroad. Prices ranged from \$7.50 per ton for lump coal to \$5.25 for steam coal. By 1925, government mines were being maintained on a standby basis in case the others ceased to function.

Most of the coal was subbituminous. However, Ross Heckey mined a highgrade bituminous on Coal Creek for coking which the Alaska Railroad utilized in its Anchorage shops. Other operating mines were the Evan Jones on Eska Creek, the Premier, the Alaska-Matanuska Coal Co., the Rawson, and the Alaska Bituminous Coal Co. on Moose Creek.

Because of high transportation cost, Alaskan coal could not compete successfully on West Coast markets. That left only the Railbelt area as a market. World War II revived the industry in the Matanuska Valley. At present, however, operations have been drastically reduced at the only remaining mine, the Evan Jones. Some strip mining is being tried in an effort to reduce operating costs and thus enable the coal companies to meet price competition from oil.

There is no question that an ample supply of coal exists in this region. However, in order to utilize it, industries using coal must be introduced into the Valley. Very little of the coal can be mined at a price allowing exportation to Outside markets. The geology of the field is also a determining factor. Coal mining will remain a rather localized industry in the foreseeable future.

In the meantime many miners have been developing farms or other businesses in the Matanuska Valley.

Chapter III - Transportation Systems and Early Settlers

Rivers, creeks and a few Indian trails constituted the first transportation system in the Matanuska Valley. Most of these were unsatisfactory to white men. They had great difficulty moving over the wet country with its alder thickets, devils-club, windfalls and the everpresent muskeg swamps.

A trail marked out by Lt. Castner and Captain Glenn in 1898 followed the shore of Knik Arm from Palmer's trading post near the present site of Knik Village to Cottonwood Creek. From here it went north a short distance, crossing Cottonwood Creek and bearing northeasterly to Finger Lake. The trail passed between Cottonwood and Finger Lakes, turning east to the Matanuska River and thence to its headwaters.¹

Captain Glenn reported that ten cabins had been built "near Melishe's cabin" by early 1898 and that 20 more were built during the summer. Melishe's cabin probably was located on Cottonwood Creek some five or six miles from the present site of Knik. It is probable, however, that several of these houses were constructed near Palmer's store at Knik and became the nucleus for the rapidly growing village. Earliest trails in the Valley radiated out from these two places.

A sled trail was built in 1900 by the Klondike and Boston Company for hauling supplies from Knik to its operations on Grubstake Gulch. This trail crossed Three Mile Lake, passed near Big Lake, crossed two more lakes near the Little Susitna, skirted the west end of Bald Mountain Ridge, then bore almost due east until it reached Willow Creek.

By 1905, when a post office was established at Knik, several hundred men were employed in the Willow Creek gold camps. Knik was a regular trans-shipping point for passengers and freight. Small craft operated between Knik Village and Ship Creek which was called Knik Anchorage and later became Anchorage.

By 1906 a trail had been opened to Susitna Station. This left the KB trail at Three Mile Lake, crossed Big Lake and went west to Susitna. From Cottonwood, another trail ran east crossing the islands at the mouth of Knik River and thence to the Indian village of Eklutna (Old Knik). From here, the trail followed closely the path now taken by the Alaska Railroad. At the head of Mink Creek, it swung south to the headwaters of Eagle River, crossed a divide and followed Crow Creek to Glacier Creek, thence to Turnagain Arm. The trail then passed around the head of Turnagain Arm and eventually met the Alaska Central Railroad tracks to Seward.

After discovery of the quartz lodes on Fishhook Creek, the Carle wagon road was built to facilitate movement of supplies by wagon in summer. This road originally left the sled trail at Three Mile Lake and bore in a northeasterly direction north of Lucile Lake. After crossing the summer trail, it gradually swung north crossing the Little Susitna about three or four miles downriver from the present crossing. It followed the west bank of the Little Susitna, then up Fishhook Creek, ending below Independence Mine.

During the years after the Nome stampede, the Iditarod-Flat region became a focal point of mining. These towns could be reached by water from Bering Sea by way of the Yukon. However, winter prohibited travel over this route and an overland route was needed. In 1910 the Iditarod Trail was marked out and improved by the Alaska Road Commission to allow the use of pack horses. It extended from Knik to Flat and Iditarod with a branch through Ophir to Nome. The trail already in use from Seward to Knik completed the winter route and Knik became an important way station. Over this route travelled men, freight, and mail. The total distance from Seward to Iditarod City was 508.24 miles.

Another trail--sometimes called the Dalton Trail--came into use shortly after 1910. It left the Carle wagon road near mile 24 and followed a ridge to Moose Creek eventually merging with the Chickaloon (Watson's) Trail. Over this route in 1913, Jack Dalton brought out coal for use in the Navy test aboard the USS Maryland.

Freighters using the Carle wagon road began turning south on the Summer Trail where the two crossed. Sometime after 1913, the wagon road was changed to pass between Lake Lucile and Wasilla Lake. The Little Susitna crossing was also changed to its present location. This was the first road developed and it is still used as part of the Valley highway system.

A petition was circulated in 1914 for building a road from Mile 25 on the Fishhook-Knik road to the Matanuska River.² This was built in 1916 and a tote road connecting Wasilla and Matanuska was constructed by the Alaska Railroad.

The Territorial Highway Commission appropriated money in 1918 for construction of the Matanuska Trunk road, eight miles in length, to intersect the Palmer-Fishhook road (Three Corners) and the Matanuska-Palmer road.

Table 1. --DISTANCES FROM SEWARD TO KNIK*

Roadhouse	12
Roadhouse	20
Roadhouse	23 1/4
Roadhouse	29
Roadhouse	34
Roadhouse	45
Roadhouse	52
Kern Creek	67 8/10
Roadhouse	72
Glacier Creek	74
Girdwood)	80 8/10
Cappers Roadhouse)	
Summit (South S.)	84 5/10
(North S.)	85 1/10
Raven Creek Roadhouse	92
Eagle River Roadhouse	110
Old Knik	127 3/10
Pioneer Roadhouse)	
Knik)	143 8/10

* This table was compiled from information found in the registers for the Pioneer Roadhouse and the Cannon Roadhouse which are in Leon Ellixson's collection.

Table 2. --DISTANCES FROM IDITAROD CITY TO KNIK MEASURED WITH BICYCLE CYCLOMETER BY THE ALASKA ROAD COMMISSION-- 1911*

<u>Iditarod City</u>	<u>Miles between points</u>	<u>Total miles from Iditarod</u>
Flat City	7.40	7.40
Discovery Otter	2.45	9.85
Bonanza Roadhouse	9.65	19.50
Ruby Creek Roadhouse	3.60	23.10
Summit Roadhouse	12.50	35.60
Moore Creek Inn	9.15	44.75
Stanford's Roadhouse	17.28	62.03
Half Way Roadhouse	5.72	67.75
Big Creek Roadhouse	12.00	79.75
Tacotna	14.00	93.75
N. C. Post (on Tacotna)	14.58	108.33
Big River Roadhouse	22.15	130.48
Mt. Farewell Roadhouse	56.80	187.28
Rohn River Roadhouse	19.20	206.48
Rainy Pass Roadhouse	8.85	215.33
Rainy Pass Summit	5.30	220.63
Mouth of Pass Creek Roadhouse	8.38	229.01
Mouth of Moose Creek	4.47	233.48
Mouth of Happy River	24.00	257.48
Hayes River Roadhouse	17.25	274.73
Alaska Road Commission Cut-off	6.75	281.48
Skwentna Crossing Roadhouse	12.60	294.08
Half Way Roadhouse	18.82	312.90
Susitna Station	18.44	331.34
Little Susitna Roadhouse	15.10	346.44
Knik	18.00	364.44

* This table was compiled from information found in the registers for the Pioneer Roadhouse and the Cannon Roadhouse which are in Leon Ellixson's collection.

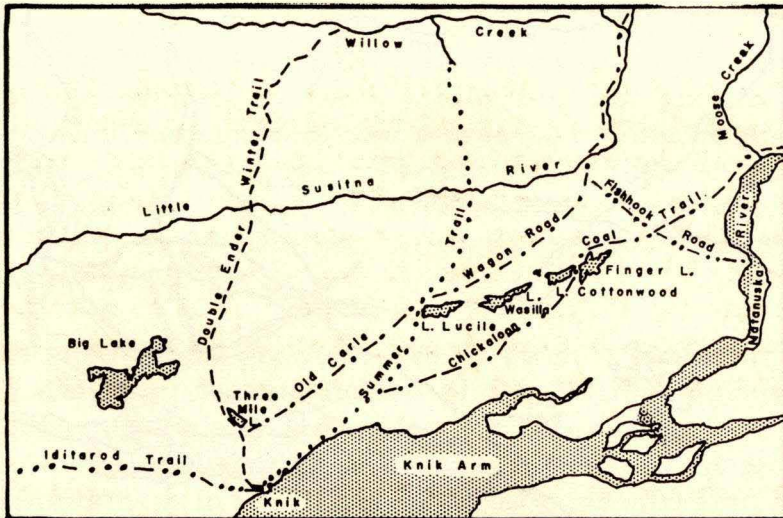
Construction of farm roads, including the Palmer-Wasilla road and the Bogard Road, began after 1919. Essentially these constituted the main network of roads. In later years they were straightened, widened and graveled.

With the arrival of the much-publicized Matanuska Colonists in 1935, work was undertaken to expand the network of roads throughout the Valley. In 1936 the highway was opened between Anchorage and Palmer. Simultaneously with the construction of the Alaska Highway through Canada, the Glenn Highway was connected to the Richardson Highway and the Alaska Highway. Since the end of World War II, improvement of roads within the Valley has continued. It is now possible to reach Valdez, Anchorage, Seward, Kenai, Homer, Fairbanks, Haines, Circle, Canadian points and the United States by automobile over excellent highways.

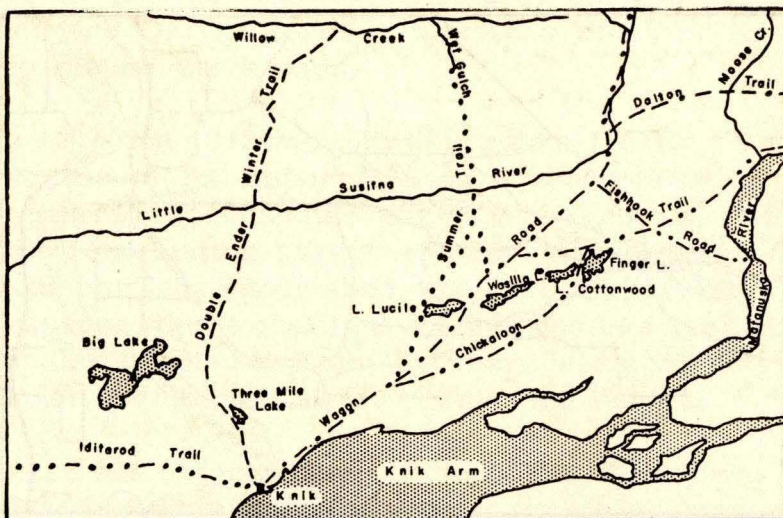
The first census of the territory of Alaska (then called the District of Alaska) was taken in 1880. The population listed for the Knik Arm area was almost entirely Indian. Petroff lists four Indian villages in that region: Knakatnuk, Zdluiat, Nitakah, and Kinik (Old Knik). Knakatnuk had a total population of 57, of which 1 was white, 1 creole, and 55 Athabaskan. Zdluiat had 16 Athabaskan and Nitakah, 15 Athabaskan. The second largest village, Kinik, boasted a population of 46, all Athabaskan.³ The census of 1890 records one trading post near the mouth of the Kinik (Knik) River and several villages inhabited by the Kinik branch of the Tnaina tribe. These villages numbered in population between 200 and 300.⁴

Petroff in his 1880 "Report on the Resources and Population of Alaska", states that there were rival trading posts on Knik Arm. In 1890 there is mentioned only one trading post at the mouth of Knik River. W. C. Mendenhall refers to a trading post opposite Palmer's trading post on the far side of Knik Arm. Of this, Mendenhall states that several years earlier the post--which was presumably located on Eklutna Flats--was flooded out.⁵ His report was written in 1898 during Glenn's explorations.

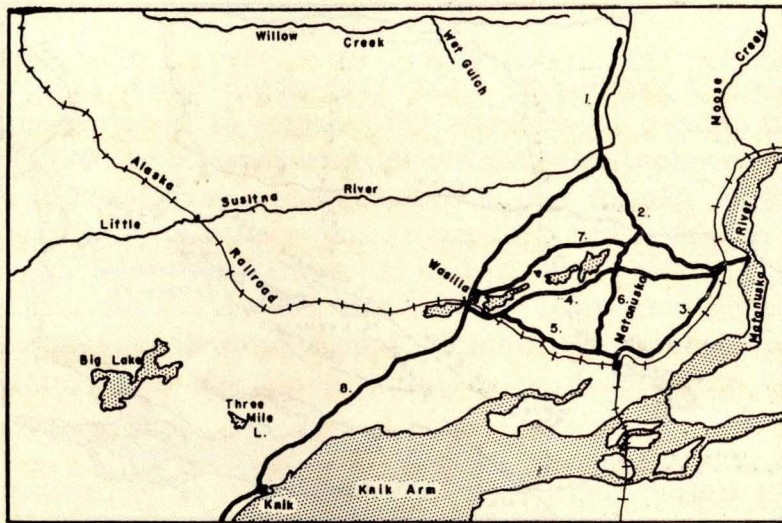
The total white population of the Matanuska Valley did not exceed two or three men before 1898. George Palmer was probably the only permanent white resident. By 1900, the white population of the Valley was approximately 100, of which there were at least the two families of George Palmer and O. G. Herning. In June, 1905, a post office was established at Knik Village and that same year O. G. Herning opened his store facing the Arm a few yards above high tide mark. He called it the Knik Trading Company.



Matanuska Valley Trails 1908-1912

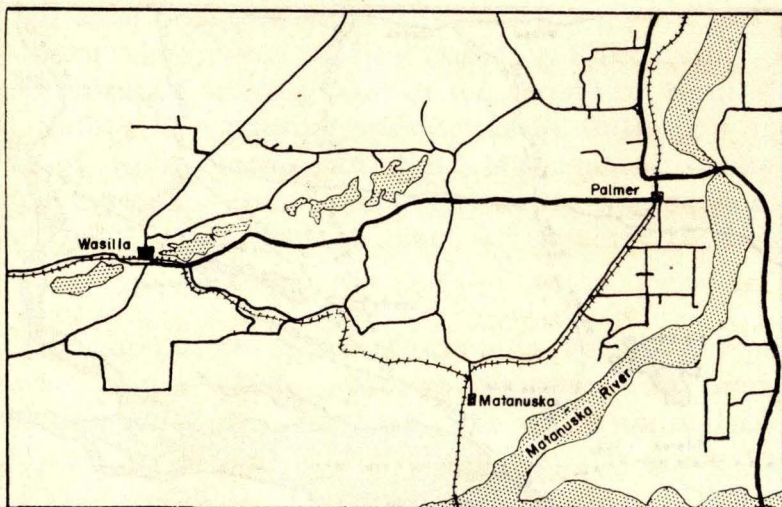


Matanuska Valley Trails 1913-1915



Matanuska Valley Roads 1916-1935

- | | | | |
|---------------------------|----------------------------|-------------------------|------------------------|
| 1. Susitna - Knik Road | 3. Matanuska - Palmer Road | 5. Tote Road | 7. Bogard Road |
| 2. Palmer - Fishhook Road | 4. Wasilla - Palmer Road | 6. Matanuska Trunk Road | 8. Knik - Wasilla Road |



Matanuska Valley Roads 1955

Knik Village grew rapidly in the next few years. Several buildings lined the waterfront. It was a one-street town except for a few short lanes leading to the residential sections.

Movement into the Matanuska Valley in the years from 1898 to 1906 never assumed the proportions of a stampede, but growth was fairly rapid. By 1905 Knik consisted of two stores, a roadhouse and a handful of cabins as well as a post office. Probably less than 50 people could be claimed as residents. Most of the population was located on Willow Creek; a few lived at Cottonwood, a small group of cabins six miles north and east of Knik.

The population of Knik had grown to 118 by 1910.⁶ Including the Willow Creek mining district, the population of the Valley aggregated better than 500 people. Travelers bound for the interior or for the States often gave Knik the appearance of a bustling town. Many residents were engaged in business in the village of Knik, some operated roadhouses along the trails and approximately twenty were farming. The rest were engaged in mining and freighting.

By 1914 Knik had stores, roadhouses, a church, a school house and a population estimated at 250. With the coming of the railroad in 1915, the population increased until over 700 people were residing in Knik, on homesteads near the village, and along the Matanuska River. Activity in the Matanuska coal fields further increased the population.

Civilization was beginning to catch up. Advertisements appearing in the Knik News of that period were aimed at the gentler sex. Both George Palmer and O. G. Herning carried a stock of fine material particularly to please the women.

The two years 1914 and 1915 were Knik's golden years. The town was small but, because of its importance as a transportation center, it boasted four general merchandise stores, two hotels, two transfer companies, two combination bakery-restaurants, one law office, one billiard hall, one bar, one candy shop, one barber shop, one contracting firm, one newspaper, three qualified doctors and two dentists. A U. S. Commissioner also resided in Knik, but there was no deputy marshall. The marshall for the third district resided in Valdez.

Although it lacked law enforcement officers, the Valley was singularly free of crime. There is no record that a miners' meeting for law enforcement was ever held in the Matanuska Valley. However, one such meeting was held in Ship Creek (Anchorage) to request a young woman "of questionable morals" to move her cabin to a less conspicuous spot in the townsite.⁷ This was accomplished without incident.

Homesteaders prior to 1914 were largely miners and freighters. During 1914-1918, the majority were men interested in farming, although a few were miners who had become discouraged with prospecting. A few were railroad workers. These men represented a wide variety of professions, among them watchmakers, cooks, musicians, captains, blacksmith, carpenters, accountants, teamsters, prospectors and lawyers. Many were immigrants. Ethnic and racial groups represented were Japanese, Scandinavian, Italian, Canadian, English and German.

Many homesteaders of this period were from the Scandinavian countries. Some were from farming regions in the States. The settlers who eventually developed producing farms had one characteristic in common: the capacity for hard work. A few who had some capital to invest in livestock and machinery developed profitable farms in a relatively short time. The majority, however, possessed little capital and many did not have the ambition necessary to clear land.

Good health, resourcefulness and physical stamina were requisites for those first settlers.

The Department of the Interior laid out the townsite of Matanuska in 1915 and auctioned city lots in 1916. Also in that year the Wasilla Townsite was surveyed and a railroad camp was situated there. The following year town lots were auctioned at Wasilla. Knik faded rapidly. With the founding of Anchorage in 1915, and the subsequent founding of Matanuska and Wasilla, Knik businessmen shifted to locations along the railroad. O. G. Herning started a second store in Wasilla and eventually closed his Knik store. George Palmer's trading post burned in 1918 and he moved to the Kenai Peninsula. A. A. Shonbeck opened a store in Matanuska later purchased by O. O. Krogh who remained there until 1935.

The railroad built a siding at the present site of Palmer in 1916. During the years from 1917 until 1930, the White brothers maintained a post office under the name "Palmer". James Felton took over the post office following 1930 and renamed it Warton. When the community center was built by the ARRC in 1935, the post office was moved to the east side of the tracks and occupied the building until recently occupied by the MEA. It was renamed Palmer. Following rapid growth of Palmer village, a building on the west side of the ARR tracks was secured and the post office moved again.

Wasilla remained the center of business and transportation for the Matanuska Valley until 1935. After that, Palmer became the center. Matanuska faded and today only the buildings belonging to the Alaska

Railroad and a few small cabins occupied by Indian families remain of a once thriving village.

At various times after 1916, post offices and schools have been maintained at Knik, Matanuska, Wasilla, Chickaloon, Eska, Jonesville and Palmer. A school was located near Finger Lake and was known by that name. With the demise of Knik, the only school operated regularly until 1935 was in Wasilla. The Palmer school opened in 1936 and has since become the Valley's largest school system.

The population of Matanuska, Wasilla, Knik and the scattered Valley farms from 1920 to 1935 numbered between 400 and 700 people. Matanuska reached a population of nearly 60 persons and Wasilla climbed to approximately 150 in 1931. Prior to the Colonists' arrival, there were approximately 700 persons living in the entire Matanuska Valley. With the coming of the Colonists in May, 1935, when 202 families numbering 903 persons arrived, population of the Valley more than doubled and since has risen rapidly. Today (1955) the population of the Matanuska Valley is estimated at 6,500. The most rapid gain has been made since 1945. No one believes it will remain static.

Much of the Valley's modern expansion has been associated with agricultural development. Its growth was slow for the first 40 years. It still has unrealized potentialities which may or may not be realized during the years ahead. Several basic problems developed over the years as will be pointed out in the chapters which follow.

PART II - EARLY AGRICULTURE

Chapter IV - Agriculture, 1898 - 1914

The early prospectors had no interest in agriculture. Indeed, throughout the entire Territory few people seriously considered farming. Yet, food was costly in all the mining camps; transportation was primitive and expensive. The thriftier miners planted gardens and a few people who had horses tried growing grain. The Homestead Act of 1898 did nothing to encourage farming; it limited land grants to 80 acres and required homesteaders to pay the expenses of surveying.¹ The cost of surveying was from \$15-\$20 a day plus traveling expenses.² No baselines for surveys existed and no provision was made for surveys.

The woefully few Congressmen willing to speak up for Alaskan interests were politely ignored or their proposals bottled up in committee. Alaskans' hopes for relief had been thoroughly dampened from their experience under the inoperative Trade and Manufacturing Sites Act of 1891.

Speaking of the homestead law issue, Senator John L. Wilson of Washington pleaded that the law be revised to meet conditions in Alaska. He pointed out that Alaska was not an agricultural district and that anyone settling land under the provisions of the act would "have an exceedingly difficult task in obtaining title".³ His words were prophetic. Alaskans were unable to acquire title under this act.

Sudden interest in Alaska precipitated by the Klondike "rush" caused the Government to turn its attention for the first time to a serious appraisal of the District of Alaska. Explorations were undertaken to study the geology of the country, to determine its potentialities, and to discover whether agriculture would be feasible. Maps were meager in detail; information was scarce and very inaccurate. The military explorations of Captains Glenn and Abercrombie in 1898 added new knowledge of the unknown interior. W. C. Mendenhall, a member of Captain Glenn's party, made the first rough geological survey of the Matanuska Valley and the country traversed by this group.

Contrary to the general opinion that nothing could grow, Alaskan gardens flourished at nearly every settlement along the coast and in the Yukon valley. A few disillusioned miners began thinking about an agricultural economy to supplement mining and to insure adequate supplies near at hand. They bombarded Congressmen with appeals for assistance.

Toward this end Congress authorized the Department of Agriculture to spend \$5,000 "...to investigate and report to Congress upon the agricultural resources and capabilities of Alaska, with special reference to the desirability and feasibility of establishing experiment stations in said Territory... and the selection of suitable locations for such stations".⁴

During 1897 Walter Evans, Benton Killin and Sheldon Jackson made trips throughout Alaska. Evans and Killin reconnoitered Southeastern Alaska, the coastal regions from Yakutat to the Aleutian Islands, and especially Kodiak Island and Cook Inlet. Jackson traversed the Yukon Valley. From these investigations the three experiment stations at Sitka, Kodiak, and Kenai were authorized by Congress in 1898.

These early stations distributed seeds to different settlements throughout the District. Seeds sent out from Sitka were planted by George Palmer near his trading post on the north shore of Knik Arm. To him probably should go the credit for introducing locally-grown potatoes to the Valley and the honor of undertaking the first agricultural efforts in the Knik lowlands. In a letter to Prof. C. C. Georgeson dated October 12, 1900, Mr. Palmer describes his early efforts:⁵

Dear Sir: Your favor of July 17 just reached me. When you learn that the nearest postoffice (i. e. Sunrise) is about 80 miles from here, and that I have to go in a small sailing boat, in perhaps the most dangerous water on the coast for small boats, you may know that I take a trip only when necessary; so my mails are few and far between. I have received no seeds yet, and it is hardly likely that another mail will reach me this fall, as navigation will soon close for the winter.

In regard to the seeds I planted last spring, will state that my knowledge of gardening is very limited, but have had very fair success so far. I have less than an acre in cultivation.

Parsnips are the finest and largest I ever saw, and the first I have heard of being raised in the vicinity.

Turnips grow to an enormous size, and of fine flavor. (Captain Glenn took a sample of my turnips last year to Washington.) This year my seeds were bad some way, as most of them went to seed. I don't know the reason why.

The Scotch Kale is a perfect success here. Two men who came here from where it is raised extensively say it was the finest they ever saw.

Cabbage is small, but heading fast at present. They have heads about the size of a pineapple cheese, and are of a fine flavor.

Ruta-bagas are large and fine; have just taken mine into the root house. I had some so big that three filled a 30-pound candy pail.

Lettuce, peas, radishes, cauliflower, and potatoes are a success.

I made a failure of cucumbers, tomatoes, spinach, and parsley, and a partial failure of onions, but I think they could be grown from seed.

The natives above raised some potatoes, turnips, kale, cabbage, cauliflower, parsnips and radishes. They are very anxious to learn. I am a very poor teacher, as I must learn myself before I can teach others. Instructions about planting should go with all the seeds you send out. Some of my failures were due to my inexperience.

Yours, truly,

G. W. Palmer

The following year Mr. Palmer describes his experience with seed sent from Sitka in a letter dated October 15, 1901.⁶ From his garden he secured enough vegetables and potatoes to carry him through the winter. What seeds he did not use himself he gave to the Indians. He ended his letter:

...It will be a material help to the natives here to get them to raising gardens, as game seems to be getting scarcer every year, and unless the Government gives them some assistance they will, before long, have a hard time to live.

The Homestead Act was amended in 1903 to allow homesteaders 320 acres of surveyed or unsurveyed land. Certain requirements with respect to unsurveyed land had to be met, but they in no way deterred men from taking up land wherever available. Within three years after

this revision at least two men had taken up land near Knik. The first was Henry McKinnon, a freighter, who took up land in 1905. Hiram Mitchell probably began gardening in 1906. Both of these men maintained large gardens and sold their surplus produce to the miners and villagers. O. G. Herning began growing oats in 1906. A few gardens were kept by villagers and by roadhouse operators.

Discovery of gold-bearing quartz on Fishhook Creek encouraged the continued flow of people into the Valley. Freighters followed to haul their heavy equipment and supplies. Horses, used by the freighters, needed good feed. Grass grew abundantly in cleared patches, especially in the vicinity of Cottonwood an area known today as the Hay Flats. It was here that freighters took homesteads to be used for pasturing livestock. Among those who located for this reason were William Hughes and Fred Crocker. Some grassland was available in the Little Susitna valley which was later utilized for cattle feeding.

By 1910 most homesteads located around Knik and on the Hayflats were adjacent to trails or easily accessible to them. These homesteads were often referred to as "ranches" although no livestock except horses was raised. One homesteader, John J. O'Brien, established a ranch on O'Brien Creek. In 1910 O'Brien wrote of his success in farming:

This year I had in about an acre of vegetables, potatoes, cabbage, rutabagas and turnips. The cabbage weighed 3 to 10 pounds. The rutabagas averaged about 10 pounds and the turnips were as large and good as usual.

I was troubled this year with worms. They were small white worms and very destructive and very abundant. I used ashes on them but to no avail. The Jersey Wakefield cabbage I find to be the best in this country. The Dutch does not seem to do well here. I will put in a much larger garden next year.

I would like to experiment with fruit trees next year if you have any for experimental purposes. I have a good piece of land and get all the sun there is, having a fine southern exposure, and also have good windbreak, my place being in a little cove.⁷

This description would fit most farms of that period. Few had more than an acre cleared; and farming was confined to raising vegetables. Because of difficult land clearing, no effort was made in dairying or

raising livestock which would require pastures. Another drawback to the early development of farms was lack of capital. Perhaps the greatest deterrant to agricultural development lay in the overpowering interest in mining gold. Any industry developed would necessarily be incidental to that.

The early years of the second decade of the twentieth century brought new and dynamic developments to the Matanuska Valley. First was the granting of Territorial status to Alaska in 1912. Second was the 1914 bill authorizing construction of a government-financed railroad. Third was the release of certain coal lands in the Matanuska field. Publicity given the area by magazines and newspapers in the States, such as an article by Secretary Lane of the U. S. Dept. of Interior in the National Geographic Magazine in 1914, brought the first large group of prospective farmers to the Valley.

The first Valley newspaper was published in 1914. Although the Knik News lasted less than a year, its colorful editorials contributed to the increasing interest in the Matanuska Valley. Knik was boosted as an ideal agricultural region and its founders proudly dubbed it "Sunny Knik". Ads described it as "the California of Alaska". Of this country the editor of the News wrote:

Not only is Knik the door to great agricultural fields of this region, but also to the mines of gold, copper, and coal. In fact, the greatest coal fields of the world are only a short distance from Knik and another year will see a great stampede to this section because of the recent coal legislation.⁸

A rectangular land survey was begun in 1912 and was completed in the following years. By the end of 1914 at least 132 homesteads had been entered and were recorded with the Commissioner at Knik.⁹ Other settlers had located land but had not filed. The greatest concentrations were west and northeast from Knik. Others had located along the Matanuska River, along the wagon road leading to Willow Creek and in the area lying between the wagon road and Matanuska River.

One other development, the Nelchina "stampede" in 1913, is worthy of note. Gold discovered along Albert Creek prompted a small rush to that region. John Bugge, one of the stampeders, estimates that several hundred men took part. The new strike proved disappointing and most of the prospectors left within a year. At least ten men--Ben Agnew, Hiram Brown, John Bugge, Sterling Dark, Ed Duncklee, George Herman, Zenith Jewell, William Larson, Charles Larson and Al Walters--returned

to settle in the Matanuska Valley. John Bugge, Ed Duncklee, and Al Walters settled along the Matanuska River at the present site of Palmer.

Many Willow Creek miners also became discouraged by the problems involved in developing their claims. Some of them returned to the Valley and began farming. The market, of course, was strictly local, comprised of only the settled area of the Valley and the Willow Creek district. Settlers believed that construction of a railroad would provide access to new markets.

Approximately three hundred acres had been cleared by 1914. Potatoes and vegetables were the major crops. No attempt had yet been made to raise livestock, although some settlers kept a few chickens. That year five cows, six hogs, two calves and one bull were brought to Knik for a ranch in the Cottonwood section.¹⁰ Also, that same year Captain Axel Olson arrived in the Valley bringing with him three Holstein and Jersey cows.¹¹ The Laubner Brothers and Dave Carsteds ranged cattle near the site of the old Fishhook Inn where they were fattened on native grasses, slaughtered and sold to the miners. The majority of homesteaders planned eventually to raise cattle, sheep or hogs.¹²

Some oats were raised mainly for horse feed. Yields were high considering the newness of the undertaking and the fact that little fertilizer was used. But, until livestock raising should become general, small grains were uncommon. A letter from Peter Murray dated 1911 will illustrate:

I take pleasure in letting you know the results obtained from the seeds you sent me. . . I planted the seeds you sent me on May 7, out in the open. Cabbage, lettuce, and radishes were up and doing well on May 17. Turnips, rutabagas, carrots, beets, parsnips, peas, beans, onions, and kale were up on May 27. The turnips did exceedingly well, particularly the White Egg variety. Rutabagas did well, also, and carrots did well on the second bench land, but did not do so well on lower or alder bottom ground. The peas filled out the pods splendidly. Kale also did fine. It grew large, but did not head out. Beans came up about 6 inches, but died out on the second and lower bench. Onions came up very thinly and were a failure. Cabbage I transplanted on July 13 and about half of them made good, solid heads. Beets did well on the second and lower benches. . . I planted about 80 pounds of commercial potatoes and got 800 pounds from them when I dug them. I also sowed some barley on alder bottom land, which grew about 30 inches and matured; oats did about the same.¹³

Murray lost his greenhouse and farm buildings in a fire that spring while he was working his placer claims. Besides such losses as this, other problems confronted the early settlers. A letter from Mr. A. Hirvela points out the difficulty some homesteaders encountered with the land:

...I have not much to report to you this year because nearly everything I planted was almost a failure. It was probably on account of the ground being too 'raw' or new and mossy. As I understand, newly broken ground hardly grows anything the first year in this country...¹⁴

In 1912 Hirvela reports that he planted 200 pounds of potatoes which yielded 2,000 pounds. The following year he planted 300 pounds on different plots which measured about 11,000 square feet and obtained about 2 1/2 tons of fair-sized potatoes. Most of his vegetables did well. For fertilizer, Hirvela used fish "guano". He points out that these crops were raised on the same land where two years before he had been unable to raise much of anything.¹⁵

That there was a market of sorts for farm products in the Matanuska Valley is pointed out in a letter from Hiram Mitchell dated June 26, 1912:

The following figures showing last season's agricultural production in the Knik neighborhood are based on estimates, but I think they are accurate:

Potatoes, 8 tons, at \$100 per ton----	\$ 800
Cabbage, 2 1/2 tons -----	250
Rutabagas, beets, carrots, turnips, etc. 2 tons -----	200
Other products in small gardens, about	100
Oat and barley hay, 3 tons, at \$75 per ton as compared with outside hay---	225
Native hay, 50 tons, some used by producer and some sold, generally valued at \$40 per ton, but compared with outside hay at \$25 -----	<u>1,250</u>
Total	2,825

The present price for potatoes and garden truck is 5 cents per pound. In connection with the foregoing figures, the following estimates are made by Mr. O. G. Herning and myself as to farm products that are shipped in by the merchants and which might have been produced here:

Pork, bacon, and ham -----	\$ 4,000
Eggs -----	2,000
Lard -----	1,500
Potatoes, 12 tons at \$70 -----	840
Butter -----	2,000
Milk, evaporated -----	1,200
Same class of goods brought in by mining companies, estimated -----	5,000
Pressed hay, 200 tons at \$60 -----	1,200
Oats for horses -----	8,000
Total	25,740

These estimates are based on what the goods cost the store-keeper and miners delivered at Knik. Adding the value of the products grown by the homesteader, \$2,825, we have a total of \$28,565.

It shows that there was a market here for nearly or quite \$30,000 worth of farm products, all of which might have been grown here. In short, it means that 30 homesteaders could each have sold \$1,000 worth of produce for home consumption. Of course, to have secured these \$30,000 it would have been necessary to have had horses, cows, hogs, hens, and tools. There is not at present a cow or hog here and only 40 or 50 hens, in this whole big region. There is not a real farm here...¹⁶

Most of the men who settled in the Valley between 1898 and 1914 were bachelors in their thirties and early forties. By 1914, however, there were approximately twenty families with enough children to warrant establishing a school. Travel was difficult and tiresome. Distances were great between stops and the country was rough. Schools, hospitals, theaters, comfortable homes and services found in the more settled areas of the United States were almost totally lacking in Alaska and in the Matanuska Valley. Women found little to attract them to the Territory. Single women, especially, were scarce.

Complaints heard today of too much government red tape were voiced even then. One article from the April 10, 1915, issue of the Knik News entitled "TOO MUCH RED TAPE IN ALASKA" has this to say:

... Utter incompetence of congress to make proper provision for the government of Alaska is shown by Secretary Lane in an article in the Outlook... Control of the affairs of that territory is divided among all the departments at Washington... Local officials have limited authority, and many questions which should be decided promptly on the spot are referred to officials at faraway Washington, who are ignorant of the conditions upon which largely the decision must be based.

... (Mr. Lane cites several examples) A man who wished to lease an island for a fox farm corresponded for months with three departments to learn who had the necessary authority, and discovered finally that none had the authority. Care of the black bear is intrusted to one department, that of the brown bear to another. Mr. Lane says; "The control of lands is in one department, of forests in another, of fisheries in a fourth, and of railways in still another." The people of Valdez applied for a townsite survey in March, 1899, but did not secure patent until March 1912. Instead of police to enforce all the laws, there are forest rangers, game wardens, protectors of the furbearing animals, reindeer guards, bird wardens, multiplying cost and impairing efficiency...

Mr. Lane proposed a development board, composed of residents of the Territory, which would have charge of all the resources of Alaska. His suggestion was never acted upon. (However, in 1945 a development board was formed to handle other problems pertaining to the Territory.)

A certain permanency in population had been established by 1914. The people were optimistic—almost overly optimistic. They faced the future with courage, resourcefulness and enthusiasm. Unfortunately, those engaged in homesteading were confronted by unsolved problems. Only by experimenting, by making mistakes, by waiting for history to advance could those early homesteaders turn the Valley into a producing agricultural area. As the nights grew longer and the snow began blanketing the land in those closing weeks of 1914, confidence in the future was their talisman.

Chapter V - Agriculture, 1915 - 1919

Development does not always follow the plans laid by men; nor does history necessarily extend a helping hand. Although groundwork for successful settlement of the Valley was laid by the end of 1914, events in the next four years made short work of it. The two mining areas contiguous to the Matanuska Valley produced spasmodically, but agricultural development bogged in the morass of international strife and local calamities.

In the spring of 1915 there were enough farms in the Valley to create problems of marketing surplus produce, storing crops and securing seed. These common problems drew the homesteaders together into a loosely organized group called the Matanuska Farmer's Association. An article appearing in the April 10, 1915, issue of the Knik News describes the second meeting of this association:

HOMESTEADERS HOLD ENTHUSIASTIC MEETING

As indicating the enthusiasm with which the homesteaders are entering into the matter, fifty-three settlers attended the second meeting of the Matanuska Farmers' Association, held Sunday last at the home of George Nylén. The meeting proved a fine success as it brought the homesteaders together for a discussion of things of mutual aid and benefit. . .

Possibly the most important matter that came up for discussion and definite action was that of roads, so necessary to facilitate the opening of the various parts of the Matanuska Valley. The discussion led to the unanimous adoption of resolutions telling of the urgent need of means of transportation, to be sent to the Alaska Road Commission.

With reference to the government agricultural experiment station to be established in these parts, a motion prevailed respectfully requesting Prof. Georgeson, or his accredited representative, to investigate the Matanuska Valley before deciding definitely on a site for the proposed work.

Due to the large attendance at the meetings, the growing interest in the association and the indications that point to a permanent and influential organization, the need of a commodious hall for business and social purposes was discussed, culminating in a motion, which carried, directing the chair to appoint a committee of three to take charge of the matter. Messrs. Leckvold, Blake and Sloan were named.

Shortly after this meeting the Farmer's Association constructed a building for storing root crops and for use as a meeting hall. A few months later, Mr. M. D. Snodgrass made a reconnaissance of the Matanuska Valley and selected a site for an experimental farm.¹

Markets were of paramount concern to the early homesteaders. The first market was limited to the village of Knik and to the Willow Creek district. A second market was created when construction of the government railroad began. Associated with this was the development of new markets in settlements along the Railbelt. A third market of the West Coast and the Territory outside the Railbelt was a potential to be developed when production exceeded local demand.

Fishing and mining formed the backbone of the Territory's economy during this period. Mining predominated in the economy of the Valley. In 1915 a cannery was built at Goose Bay, but played a small part in development of the region. For the early settler, then, the only market still was Knik.

In the first reports on the feasibility of agriculture in Alaska, it was recommended that agriculture be developed to supplement mining in the economy of the different districts studied. Some writers thought agriculture could become the sustaining industry in developing a stable society; others believed that, at best, it would be merely another field to exploit. This latter opinion was held by most men homesteading in the Valley. The question raised by this attitude was: Will the development of one enterprise benefit and encourage development of the other?

Early miners in the district shipped in all supplies; none were available in the Cook Inlet region. By the time farms began to appear, mining had become "big business" and organized companies were working the lode mines of the Willow Creek district. Much of the capital invested in these companies came from the States. Contracts to supply the mines were made with Stateside suppliers at the beginning of each working season. This practice continued after the Valley farmers had surplus produce for sale. Some miners bought local produce, but not nearly as much as the market indicated. During 1914 and 1915 no effort was made to study existing markets or to develop them. Production had not reached the point where demand could be satisfied.

Agriculture in the Valley came into its own in 1915. Most of the 150 settlers filing for homesteads came intending to farm. Some cleared enough land to put in a crop the next year. Settlement was concentrated in the vicinity of Knik, across the Hay Flats and up the Matanuska River with a few homesteads spotted along the trails leading to Fishhook

The Knik News

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JANUARY 9, 1915

Some Coal Lands Open

Washington, Jan. 2.—Secretary Lane of the interior department today signed the regulations by which the Alaska coal lands outside the coal fields of Matanuska and the Eering River are opened in ten acre tracts to Alaskans. In the regulations the government has imposed no royalty or other charges so that those who mine the coal for local uses will have nothing to meet but the expenses of getting out the fuel. It is expected now that the opening of the Matanuska and Eering fields will be opened without greater delay than is necessary or the proper adjustment of matters so that no complications may come by the leasing of the lands to private parties. No intimation has been given by the government authorities as to when the government itself will take steps for the operating of the fields for naval uses.

The Field Force Arrives

Seattle, Jan. 7.—The Alaska field division of the general land office is now on the way to Juneau to make that city its future headquarters according to the decision recently arrived at by the department. Andrew Christiansen, the chief of the division, sailed for Alaska last night with the records of the office. Nine men will be employed in the Juneau office. That office will have charge of the Alaskan coal claims investigations.

Up to the middle of December Norway, Sweden, Denmark and Holland between them lost two ships by mines. The total value of the ships and cargoes was ten million dollars. In the destruction of the vessels eighty-seven lives were lost.

Would Sell Copper River

Washington, Dec. 31.—J. P. Morgan yesterday morning made a formal offer to Secretary of the Interior Lane to sell the Copper River and Northwestern railroad to the government at its appraised physical valuation. No answer was given by the secretary and no answer probably was expected, but the financier wanted to make offer in time. There is no chance whatever apparently that any definite statement will be made by the secretary or the president about the government railroad until the report of the commission is ready. Delegate Wickersham has sent a call to the members of the three Pacific coast delegations to meet Friday morning to discuss methods for getting an appropriation which was urged by Secretary Redfield for aids to navigation in Alaska. It is expected to get these appropriations through this session. The appropriations are now before the committee.

A. K. Beatson Is Dead

Edward, Jan. 4.—In a letter to the stateway from Mrs. Flora Beatson is contained the sad news that her husband, Andrew K. Beatson, passed away at Los Angeles on December 16. Mr. Beatson was the discoverer of the Bonanza group of copper mines on Latouche island and was one of the most prominent figures in the Alaska mining world. Mr. Beatson's death will be regarded as a loss by very, very many.

Suits, "Alfred Benjamin," and "Hart, Shafner & Marks." Quality first. Brown & Hawkins.

The outside mail arrived from Seward this evening.

The M. L. & D. club gave another of their delightful dances Friday night. The attendance was not large but those who did attend spent a delightful evening.

Japan May Send Soldiers

Tokio, Dec. 31.—The Japanese foreign office announces that no nation has requested that a Japanese army be sent to Europe to take part in the war against Germany. A report is current in Tokio that the Russians favor sending of the Japanese reinforcements, but Great Britain hesitates because of the economical and political difficulties which might arise. The expense of sending the Japanese would probably fall on Great Britain to a great extent.

Nothing Is Assured

London, Dec. 31.—Nothing of a definite nature has arrived in the dispatches from the front this morning. In the west along the entire front from Alsace to the North Sea the allies have exerted steady pressure and have made slow progress almost everywhere. In upper Alsace the French entered the village of Steinbach which was occupied after severe house to house fighting half the community taking part in the battle as well as the soldiers. The defeat of the Austrians in Galicia is not denied but Vienna has sent no confirmation of the intelligence. The German forces in Poland are finding it extremely hard to continue towards Warsaw. Petrograd believes that the German offensive has broken down but it is possible that the invaders are reorganizing their forces with a view to another determined attempt to push the Russians further back. The taking of Warsaw apparently depends on the success of the German forces advancing from the north. If they can succeed in making headway the Russian center may be compelled to fall back to avoid being taken on the flank or rear. Petrograd also announces that a Turkish column has been defeated in Transcaucasia and dispersed by artillery after great loss.

He Gets the Plum

Washington, Dec. 29.—Charles E. Bunnell of Valdez, was appointed district judge of the Fourth Alaska division today by President Wilson to fill the place made vacant by the voluntary retirement of Judge Fuller. Although it has not been officially said there is every reason to believe that of all the candidates for the place the claims of Mr. Bunnell were regarded as higher than those of the others because he is an Alaskan and because he was the nominee of the regular democratic party of the territory for Delegate to congress. Mr. Bunnell's confirmation is expected soon after the reconvening of congress although it is suspected that the supporters of at least one other nominee may try to cause a fight.

Fear Felt for Buffalo

The mail carrier arriving this evening from Old Knik is authority for the statement that Capt. Denny of the Buffalo, left Kern creek for Knik on Tuesday last with fourteen passengers. The mail carrier was much surprised when he learned that the Buffalo had not reached here. When asked whether he was jesting he said no; that the mail carrier that met him at Old Knik told him that it was the intention to bring the mail from Kern creek to Knik this trip on the Buffalo but that the boat was gone when the mail arrived there. It is hardly thought that the Buffalo has been lost, but there is danger that she may have gotten in an ice floe from which she has been unable thus far to free herself.

Too Much Red Tape in Alaska

Utter incompetence of congress to make proper provision for the government of Alaska is shown by Secretary Lane in an article in the Outlook entitled "Red Tape in Alaska." Control of the affairs of that territory is divided among all the departments at Washington, and authority overlaps and conflicts at numerous points. Local officials have limited authority, and many questions which should be decided promptly on the spot are referred to officials at faraway Washington, who are ignorant of the conditions upon which largely the decision must be based.

Mr. Lane cites several examples of the confusion resulting from what he well terms "the red-tape system of administrative machinery," and from the absence of men on the spot who are endowed with full authority. A man who wished to lease an island for a fox farm corresponded for months with three departments to learn who had the necessary authority, and discovered finally that none had the authority. Care of the black bear is intrusted to one department, that of the brown bear to another. Mr. Lane says: "The control of lands is in one department, of forests in another, of roads in another, of fisheries in a fourth and of rail ways in still another." The people of Valdez applied for a townsite survey in March, 1899, but did not secure patent until March, 1912. Instead of police to enforce all the laws, there are forest rangers, game wardens, protectors of the fur-bearing animals, reindeer guards, bird wardens, multiplying cost and impairing efficiency.

An indisputable case is made for Mr. Lane's scheme to create a development board which shall have charge of all the resources of Alaska, composed of residents of the

Creates Reserve on Cook Inlet

By executive order, the following reserve has been created:

Beginning at Granite Point, a headland projecting into Cook inlet about five miles southwest from Tyonek, and approximately in latitude 60 degrees 01' north and longitude 151 degrees 21' west, which point is also marked by large rocks exposed at low tide:

Running thence westward with the shore one-half mile to a point thence north to the middle of the main current of the China river, eight miles more or less, thence with the main channel of said stream to where it discharges into Cook inlet, thence along the shore thereof southwesterly to the point of beginning, estimated to include 25,000 acres.

The reserve is for the natives and is subject to any existing vested rights.

Delegate Wickersham has started a campaign to secure for Alaska full statehood. Senator Hubbard introduced a resolution favoring the scheme, but the senate turned it down in favor of Millard's resolution for fuller territorial government.

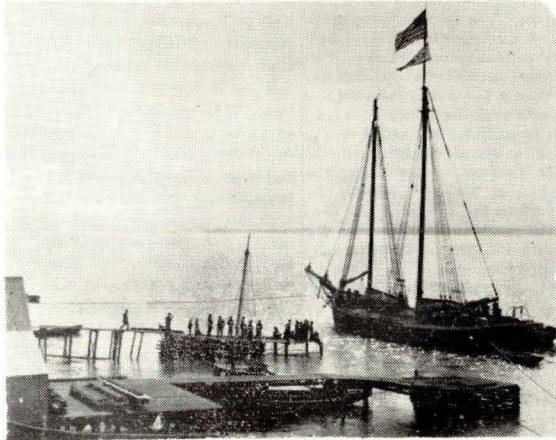
The legislature will pass the Snow bill permitting the people of Alaska to vote on the question of prohibition, according to a report from Juneau.

territory, with full authority under the direction of a single cabinet officer. For all practical purposes of administration, Alaska is as remote from our seat of government as are the Philippines. Great Britain might as well attempt to rule India and her colonies in every detail from London as the United States attempt to rule Alaska from Washington.

Fresh Ranch Eggs. Brown & Hawkins. "Quality first."

JOE MORRIS

WM. DEVINE



Boats at Knik, about 1910

KNIK TRADING COMPANY General Merchandise

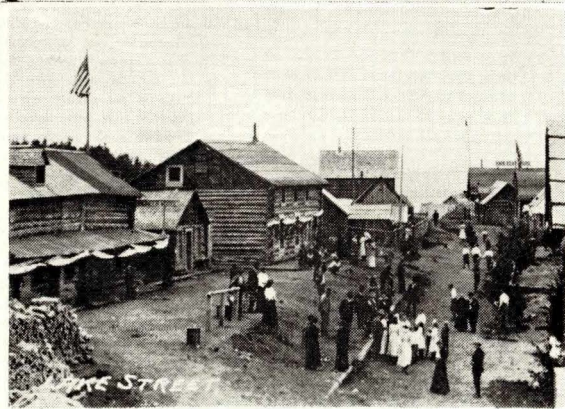
Willow Creek
Matanuska Valley

Broad Pass District

O. G. HERNING,

Knik,

Alaska



Lake Street, Knik

Groceries and Hardware

Let Us put up Your Outfit. Our prices are Right and Our Merchandise the Best

Pioneer
Hotel

F. B. Cannon,
Prop.

Knik,
Alaska

KNIK'S LEADING HOTEL

NO BAR

Accommodations for Society Cases
Large General Lobby - Private
Lobby for Ladies
Best Rates - Best Treatment
Best Accommodations

American Plan

EOPOLD DAVID HUGHES & PEDERSEN

Attorney at Law

NIK,

ALASKA

KNIK,

ALASKA

Creek. The greatest influx of settlers occurred in 1916 and 1917. By the end of that period nearly all the available land had been homesteaded-- a fact not commonly known. In the peak year of 1916, 111 entries were recorded.

Little was known about the soils of the country except what knowledge had been acquired from experience. Hugh H. Bennett made the first soil reconnaissance of the Valley in 1914.² However, because of travel difficulties and inaccessibility of large sections within the Valley, his samples were taken from areas adjacent to trails. Unfortunately, the trails did not pass through the most fertile sections of the Valley. Bennett's report remained the only comprehensive discussion and analysis of Valley soils until Rockie's report in 1939.³ His grouping of soils provides the basis for present day classification.

A paragraph from Bennett's report mentions the land under cultivation in the upper Cook Inlet-Susitna Region during 1914:

Probably 500 acres, at least, are now under cultivation. The lowest estimate of land cleared for cultivation is 1,000 acres. The greatest activity is centered about Knik. The most extensive development at any considerable distance from the villages is that in the Cottonwood section along Knik Arm to the northeast of Knik. Here men who had previously devoted most of their lives to prospecting and mining are comfortably supporting themselves by the products of the farm, with the assistance of some earnings derived from outside work.⁴

Besides lack of scientific information concerning soils, early homesteaders faced the necessity of clearing timbered lands. Hand clearing, an arduous task at best, was the only method known. Under certain conditions underbrush and moss could be removed by a slow ground burn. This method also burned the roots of the trees and made their removal relatively simple. However, a ground burn could be started and maintained only if the underbrush and moss had dried.

Trees were cut with axes and stumps were pulled with block and tackle and winch. Both hand-operated and horse-operated types were used. Underbrush was removed by grubbing with a mattock. Brush, stumps and trees then were piled and burned. Burning over the area to be cleared was thought the best method.⁵ Clearing cost \$60 an acre for burned over land and \$125 to \$200 for green timber.⁶

In preparing the soil for cultivation, Bennett suggested that:

...Owing to the fact that newly-plowed virgin land in this portion of Alaska generally does not give the best results with crops, it is unquestionably advisable to break new ground at least a year before putting in a crop. This gives some time for the improvement of the soil by the ameliorative action of the air. Those lands having a thick covering of moss, a frozen subsoil, or imperfect drainage would likely give best results if plowed at least two years before putting in the crops...⁷

The raw and sterile condition of the soil made fertilization necessary for good yields. Lime, wood ashes and fish offal were used. Wherever vegetables were planted on first year land, yields were usually disappointing. However, in cases where land had first been burned over and the moss removed, yields were satisfactory the first year.

Many farmers of this period were inexperienced. They were especially inexperienced with Alaskan agriculture. The recommendations given by Mr. Bennett for treatment of newly cleared ground either were ignored by or unknown to the homesteaders. Demand for potatoes and vegetables encouraged many settlers to plant all available land to these crops regardless of when or how well the land had been cleared.

A clearing fire started by Alaska Railroad crews in 1915 burned over an area extending from Matanuska Junction to the vicinity of Palmer. Several homesteaders took advantage of this windfall by locating their homesteads in the burned-over area. A. A. (Tex) Cobb, for example, located his land directly north of Matanuska Junction.

In the spring of 1915, the route for the government railroad had definitely been established and Ship Creek (Anchorage) had been laid out as a division point from which construction would extend both north through the Valley and south to Kern Creek. Only the homestead of Mr. J. D. Whitney had been taken up along Ship Creek prior to location of the railroad. With the founding of Anchorage, several farmers from the Valley moved to be nearer the newly created market. Other Valley homesteaders moved to Anchorage later, but for reasons other than farming.

The sudden demand for potatoes and vegetables created by railroad construction caused an unprecedented boom in the Valley's agricultural economy. Potatoes became the most important cash crop. Although the Valley was recommended for development of diversified farming, nearly all the farmers specialized in potato raising. Livestock was scarce and the settlers were not inclined toward dairying while the

demand for potatoes and vegetables remained high. Only a small percentage of cleared land was used for growing cattle feed. Native red top (Calamagrostis sp.) grew abundantly in a few natural clearings and was cut as hay. The high cost of shipping in feed further deterred livestock production.

Heavy yields in 1915 and 1916 which were readily marketed encouraged the farmers to further increase acreages planted to potatoes. No attention was paid to seed varieties best adapted to conditions in the Valley. Perhaps the most popular variety was the Matanuska, about which little else is known. During this period, seed potatoes were shipped in to supplement the limited supply available among the farmers. Some of the varieties introduced proved adaptable; others did not.

When the 1917 season rolled around approximately 400 settlers prepared to plant a larger crop than ever before. The Matanuska Farmer's Association's building was ready for use in Matanuska Junction; construction on the railroad was proceeding at a rapid rate. The Alaska Road Commission had completed a new road from the Little Susitna valley through Wasilla to Knik. Other plans called for constructing a network of roads to replace trails then in use.

Prosperity seemed certain as the farmers took to the fields those first days of May 1917. But with the entry of the U. S. into World War I, Alaska was to be left in a state of almost complete stagnation. The war profoundly affected the Matanuska Valley.

Alaska's manpower answered the call to duty with characteristic enthusiasm. Men left undeveloped farms, unfinished construction, partially developed mines and industries. Railroad construction suffered immediately from lack of funds, scarcity of materials and lack of manpower. When the harvest was completed in September of 1917, the market had shrunk and a ruinous surplus of potatoes and vegetables resulted. The potato crop for 1917 was estimated at 1,300 tons.⁸ There still remained 600 tons of unmarketed potatoes in the spring of 1918. These were lost because there was no livestock to eat them.

Because of this unsold surplus, many farmers failed. Swan Youngquist was reported to be the only farmer who made money in 1917. He sold directly to Anchorage residents. The Farmers Association was dissolved in 1918 and its debts were assumed by several men in the Valley, among them F. F. Winchester and Al Walters. Farming was too undeveloped and lacked reserve capital to survive these adversities. By 1920 less than 200 settlers remained in the Valley. Not until the Colonists arrived in 1935 did agriculture again move ahead.

A considerable reduction in the area planted during 1918 resulted from experiences with the surplus of the preceding year. Approximately 500 tons of potatoes were harvested and sold for prices ranging from \$35 to \$60 per ton. Although one farmer had a yield of 18 tons on 1 1/4 acres, the average was only 3 1/2 tons per acre.⁹ Land not planted in potatoes was seeded to grain, mostly oats and beardless barley. Most of this was cut for hay.

M. D. Snodgrass, on the Alaska Engineering Commission's recommendation, chose section 15, township 17 north, range 1 east of the Seward Meridian, which originally consisted of 240 acres as the location for the Matanuska Experimental Farm.¹⁰ Section 14 adjoining the 240 acres was later set aside for the station, making a total of 880 acres to be developed for experimental purposes. For the fiscal year ending June 30, 1918, \$10,000 was appropriated for the station and work was begun under the direction of F. E. Rader on April 1, 1917.¹¹

The first three years were spent in clearing land and erecting buildings. As soon as land was cleared, Rader began testing varieties of potatoes and grains. He also maintained a garden and nursery. Some machinery was placed on the farm. Grain testing among settlers had been initiated prior to establishment of the experiment station but first results were disappointing. Few farmers participating took the time and effort necessary to make their experiments successful. Rader continued these efforts. His greatest difficulty lay in convincing farmers to save seed from the ripened grain. Lack of threshing machines in the Valley was a handicap. Not many settlers wanted to use the ancient hand flail.

Sugar beets were grown at the Matanuska Station in 1918 and were tested for sugar content. They were satisfactory except for size--larger beets being preferred by sugar manufacturers.

In this same year, C. C. Georgeson met with farmers of the Valley. Twenty-six farmers gathered at the experiment station and a similar group met at Wasilla. According to Georgeson, the meetings were held to "...endeavor to impress upon them the necessity of producing their own foodstuffs as far as possible and of relying less on cash crops with a view of shipping their supplies from the towns".¹²

The shift of population from Knik to Matanuska Junction and Wasilla along the railroad right of way ended Knik's importance as a transportation and trading center. Farmers located west of Knik along the Iditarod Trail were far removed from the new trading centers. Their farms had been economically productive, but only because of their close proximity to the focal point of activity. Soils in that area were less fertile than

those found along the Matanuska River or between Wasilla and the Palmer siding. After loss of markets following World War I several of these homesteads were abandoned.

Some homesteaders re-located in more productive areas. By 1920, the settled area was roughly triangular in shape lying between Wasilla, the Matanuska River, Matanuska Junction and Knik. Heaviest concentrations of farms were between Wasilla and Palmer siding, Matanuska Junction and Wasilla, and Palmer and Matanuska.

Homesteading did not cease altogether during this period. Coal mining had developed into a sizable industry and many men connected with it started homesteads near their work. Several located land at the mouth of Moose Creek and along the railroad between that area and Eska. But the influx of men interested in farming ended after 1918.

The oldest farm remaining under one ownership and in continuous production is that of John Bugge who homesteaded 320 acres in 1914. Bugge ceased farming actively in 1946, although he has continued clearing and renting land and raising hay. His farm is located contiguous to the western limit of the city of Palmer.

Bugge came to the Territory in 1900, living first in Southeastern Alaska. In 1913 he arrived aboard the Northwestern at Ship Creek (Knik Anchorage) and from there traveled by launch to Knik. He joined the Nelchina stampede, "necking" a sled up the Matanuska River in company with Al Walters in the winter of 1913. Finding the region poorly suited to mining, they returned to take up homesteads in the Valley.

In the spring of 1914, Bugge purchased a horse from Hughes, the freighter from Knik, and, in order to put up hay, located his present farm at Palmer shortly after the survey had been completed through that region. John Loken and Ed Duncklee followed suit, filing on adjoining tracts. Loken's homestead is now occupied by Roland Snodgrass. Al Walters filed on the tract directly west of Bugge and Frank White made entry on the land east of Bugge. The White homestead now is included in the city of Palmer.

By that fall, Bugge had constructed his first house and had dug a well. His house served as a stopping place for people traveling through the Valley along the Matanuska River. He recalls that one night he put up 14 men and 13 dogs. During 1915, he began purchasing machinery for his homestead. That year he acquired a plow and the following year he added a drill, mower and rake to his collection. In 1917-1918 he purchased a disc, binder, thresher and Fordson tractor. Previous to

this, he had shipped a team of mares from the States at a cost of approximately \$600. A stallion shipped in by A. J. Swanson made it possible to raise three colts.

Bugge was the first homesteader to acquire enough machinery for farming on a fairly large scale. His were the first tractor and the first thresher in the Valley. The experiment station acquired the second thresher. Because of his extensive collection of machinery, Bugge did custom binding and threshing for the settlers near him. Among some of these early homesteaders for whom he worked were Ross Heckey, John Springer, Arvid Bergstrom and Adam Werner.

When Bugge took up his homestead, Ira Miller, a cook by profession, had located a homestead along the river and had established a camp. Miller's homestead was later purchased by A. J. Swanson, who sold the north half to Max Sherrod. Those who settled near Bugge remained on their farms until the early 1930's. All these places are still being actively farmed except for those portions purchased by the ARRC and now in the Palmer community center.

Another settler, Adam Werner, filed on a tract located northwest of Palmer. He came to the Valley in 1914, taking up his homestead at that time. Werner first trapped with a partner who later was drowned in the Matanuska River. Until the late 1920's, Werner trapped winters and developed his farm during the summer seasons and concentrated on farming and developing a dairy herd. He died in 1944 and his widow has continued operating the farm which is today one of the Grade A dairies in the Valley.

In May, 1914 two other homesteaders, Clifford and Ashley Egtvet, arrived at Knik Anchorage aboard the Admiral Sampson. Their previous experience had been farming in the Skagit Valley of Washington and they proposed to raise meat, milk and vegetables for the miners and hay for the horses used by the freighters. From Knik, the Egtvets packed their outfits to Mile 25 on the Knik-Willow Creek road, turned east along a trail to Moose Creek, and south along the banks of the Matanuska River to the camp of Ira Miller. Their first cabin was located a half mile south of Miller's place.

The Egtvets acquired a team of large Percherons, a plow, disc, and six foot Deering mower in 1915. They also built a large barn, cut a road to intersect with the railroad right-of-way at what is now Palmer, set clearing fires along the road with a blow-torch, and put up native hay for their horses. The following year they harvested 14 large loads of oat hay (one of which sold for \$50) and enlarged their clearing to approximately 13 acres.

In 1916 Clifford homesteaded the present Egtvet place and Ashley made entry on the adjoining piece to the south. However, Ashley left that year, and in 1917 joined the Marines. Clifford remained on the homestead and developed it into a producing farm. Ashley did not return to the Valley until 1936, when he visited Clifford. In 1945 he reestablished his residence near Palmer and has since farmed.

Age made little difference on the frontier; most of the homesteaders were in their late 30's or early 40's. A few were older; a few younger. Carl Martin, younger than average, first came to the Matanuska Valley in 1909 in company with "Tex" Cobb. They traveled from Knik to the Cache Creek prospecting country. Later Martin returned to the Valley and took out a homestead near Matanuska Junction.

By removing and burning the trees after the railroad clearing fire of 1915, Martin grew several acres of potatoes in 1916. Most of these he sold to the railroad. In 1917, he harvested 60 tons of potatoes and 1,500 heads of cabbage and cauliflower despite a hard freeze on September 3 of that year. Martin joined the army during World War I and upon his return became a successful miner. He still owns most of his homestead.

Several other settlers enjoyed considerable success from farming. Some considered "good farmers" included Jake Metz, Swan Youngquist and W. J. Bogard. The first two were principally potato growers, while Bogard raised livestock in addition to his potatoes.

To raise the necessary capital for his farming operations Metz worked in the Willow Creek Mines. Other homesteaders worked for the railroad or freighted to supplement their farming. However, World War I drastically reduced employment. It forced those who depended on this outside income to devote their entire time to farming. Without this additional capital many settlers were unable to develop their farms and subsequently left the Valley.

One of the most successful potato farmers of this period was Swan Youngquist, who built a root cellar in Anchorage and sold extensively throughout the winters. He shipped his potatoes via Captain Howe's boat and later via the ARR. He later retired, returning to Sweden with approximately \$12,000.

Of all the early settlers, Bogard was considered one of the most successful. He continued farming until his death in the early 1930's. During that time he was instrumental in getting a road (the present Bogard Road) built through the region north of the lakes. He had about 70 acres under cultivation and in pasture at the time of his death.

Successful early settlers found that diversified farming was the best long term bet. Farming earned little better than subsistence for most of them. Those settlers who depended entirely on potatoes found farming difficult. The Valley population dropped off markedly during the War and by 1920 only a handful of settlers were left. From 1921 to 1928, the population remained static.

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Chapter VI - Agriculture, 1920 - 1929

The National prosperity following World War I did not touch Alaska. Although mining was restored to much the same level as in the preceding decade, agriculture was neglected. Consequently, many of the gains made prior to World War I were lost. There was little incentive for developing a remote, rugged land agriculturally. Capital was not available. Worst of all, Congress appeared unconcerned with the internal problems of a territory it had purchased reluctantly in the first place.

Economic conditions were bad for Alaska in 1920. Population had fallen off. Those settlers who remained on farms were not full-time farmers. Although a sizable acreage had been patented, much of it remained undeveloped. Fields formerly cultivated were being reclaimed by wild grasses and brush. This situation further retarded agricultural progress in the Valley.

Problems confronting homesteaders during the 1920's were of somewhat different nature than were those of the preceding decade. Agriculture boomed in 1914 and 1915 because new markets were available. Some of these disappeared upon completion of the railroad. Others were lost during World War I. Anchorage and the settlements immediately along the Railbelt were all that remained.

High transportation costs discouraged any attempt to tap more distant markets. Valley farmers made their first unsuccessful attempt to have freight rates adjusted in 1917. Unfortunately their organization ceased functioning after 1918 and the farmers who remained in 1920 were unorganized for effective action. Distances within the Valley further isolated the farmers from one another. The settlers were concentrated at Wasilla, Matanuska and Palmer.

Development of coal deposits on Moose Creek, Eska Creek and Chickaloon River during the 1920's became the Valley's most important industry. Also, the Willow Creek District became the second most important lode mining region in the Territory. Nearly 1,000 men were employed in gold and coal mining during peak months.

To bolster their meager earnings farmers sought employment in the mines, on the railroad, and with the Alaska Road Commission. A survey made by the Alaska Agricultural Experiment Stations in 1923 to determine the number of homesteaders and the extent of their farming operations shows that nearly two-thirds of the Valley farmers (105) were not enumerated because they were employed away from home at the time.¹

Mining, then, was not important as a market, rather it was a source of employment enabling the farmers to augment their incomes.

Where were the markets? A very small amount of farm produce could be disposed of locally. Anchorage and the commissary of the Alaska Railroad were the only others. However, Anchorage merchants were reluctant to purchase anything grown in the Matanuska Valley. They had two excellent reasons for their attitude: Outside produce could be shipped to Alaska and retailed at less than Valley produce cost them, and the quality of Valley potatoes and vegetables was unsatisfactory.

Valley farmers complained that freight rates were discriminatory, and Anchorage merchants made no effort to co-operate with them in marketing their produce. That there were legitimate arguments on both sides cannot be denied. The problem was one of poor public relations but until 1923 no steps were taken to alleviate this situation.

On November 10, 1923, a meeting of Valley farmers was held at the Matanuska Experiment Station with M. D. Snodgrass, Superintendent of the Station, acting as chairman. During his address he set forth the purpose of the meeting and gave data he had collected on imports, markets and freight rates. He had written two letters, one to Col. Landis, manager of the Alaska Railroad and the other to Mr. Dan Sutherland, Alaska's representative to Congress at that time, "... requesting them to give attention to the matter of lowering freight rates on livestock and other important matters that might help develop the agricultural industries".²

An organization was formed and named the Matanuska Valley Settlers Association. John Bugge was elected president; O. O. Krogh, vice-president; George E. Hatcher, secretary; F. F. Winchester, W. W. Wade, and George Winters, finance committee; and M. D. Snodgrass, Harry Harmon, F. F. Winchester, Frank White, and W. J. Bogard, executive board. A letter was sent to Mr. Sutherland regarding a loan for purchase of livestock; another was sent to the Alaska Policy Board regarding freight rates.

At the third meeting, Mr. Winchester reported an interview with Mr. Gottstein concerning a cannery to be built at Matanuska. Subsequently, information was gathered on the cost of a cannery and the potential market for canned goods. Anchorage businessmen were interested in the project and promised to co-operate in the enterprise. However, they cautioned the farmers to confine their efforts to a small scale. They weren't to start anything large until they could prove their success. Suggestions were made to include a packing plant, creamery and cheese factory in the same building with the cannery.

Col. Landis assured the Association of a warehouse for its use and pointed out the market offered by the Alaska Railroad through its Stores Department. A potato grader also was available and was stored in the warehouse. Definite steps were being taken to put an end to the problems plaguing Valley farmers.

The last Association meeting was held May 31, 1924. Although the Association survived less than a year, it accomplished one thing; the reduction of freight rates. The cannery project was allowed to die and solution of marketing problems was left to the individual farmer.

During this same period, the Matanuska Experiment Station began developing a strain of dairy cattle suitable for the Valley. The first herd of five milking Shorthorns was introduced in 1920. The following year six Galloways brought from Kodiak were added. Eventually the herd included Shorthorns, Holsteins, and the Holstein-Galloway cross-breed. The Station bull was loaned out to Valley settlers for breeding purposes.

Emphasis was on development of a dual-purpose strain of cattle suitable for both dairy and beef. It was thought that such an animal, able to withstand the rigorous winters, would best suit the farmers' needs. The Station herd became one source from which the Valley farmers were able to secure cattle.

A flock of 16 Cotswold sheep was brought to the Station in 1920. This introduction interested several farmers in the sheep enterprise and they bought most of their foundation stock from the Station flock. By 1930 three farmers owned 221 sheep.³ W. Bogard, whose homestead was on the north shore of Finger Lake, owned the largest flock. Dogs were a serious problem to the sheepmen and often caused considerable damage. In 1924 they injured all but one sheep in the Station flock. Only four ewes and four lambs survived.⁴

Not all homesteaders during this period wanted to raise potatoes, garden truck or livestock. Several took up land for fur farming. Some enjoyed a measure of success; others, for various reasons, accomplished little. Neglect and poor management resulted in failure.

One of the most successful was "Heinie" Snider whose farm was just west of Wasilla. Starting with captured mink he raised as many as 66 in one year and sold them for \$100 a pair. His largest shipment brought \$9,000 but when the price of furs dropped he turned to mining.

James Felton also became very successful in fur farming. He settled on the Hogbird homestead in 1920 and eventually patented it. He stayed there raising fox and mink until 1929 when he sold his homestead and went Outside. Returning eight months later he bought out the White brothers.

Rabbits extensively damaged crops in the years 1913 and 1924 and some farmers erected rabbit-proof fences. Fortunately, rabbits appear in great numbers only at intervals of seven or ten years.

Besides these predators, diseases often damaged or destroyed the crops. In 1928, for example, blackleg, Rhizoctonia, leaf curl and scab reduced potato yields. Cutworms also did extensive damage. Individual farmers found it necessary to experiment with different solutions to eradicate these pests. Heinie Snider effectively used creoline to rid his cauliflower of root maggots and cutworms. The Matanuska Station undertook tests to determine effective insecticides. Some success was achieved in combating these different pests and diseases, but consumers were warned to wash thoroughly all vegetables coming from the Matanuska Valley. This warning did little to bolster consumer enthusiasm for locally-grown products.

Many settlers were interested in raising beef as well as dairy cattle. This interest in a new enterprise brought to light a new problem. Because of the inclement weather during July and August, curing hay was difficult. Various methods were tried. A. A. Shonbeck, who had several acres under cultivation in the vicinity of Palmer, erected a hay drier in 1934 which is owned and still used by four Valley dairymen.

Another problem was getting the necessary grain for feed. The usual practice was to cut oats and other grain for silage. Shonbeck and Bugge began threshing oats for grain in 1930.⁵

A small four page pamphlet printed sometime during this period, entitled "Wasilla, The Key to the Matanuska Valley", gives an excellent picture of the country around Wasilla. The unknown author mentions several successful farmers. O. C. Miller was said to have the most fertile farm in the Valley. Both Miller and Olaf Wagner specialized in raising garden truck. Dan Donovan raised strawberries and was unofficially known as the "Strawberry king". Charlie Johnson, whose farm was located on Lake Wasilla, supplied milk to the town of Wasilla.

By the late 1920's, several farmers had small dairy herds. Through co-operation of the Alaska Railroad and the Alaska Agricultural Experiment Stations, a creamery was constructed at Curry in 1927.⁶ This created a market for milk produced in the Matanuska Valley.

The animal husbandman of the Matanuska Experiment Station supervised the experimental work, the Alaska Railroad financed the undertaking and bought the cream from farmers to make butter for its commissary. Most of the butter was sold through hotels operated by the Alaska Railroad. It was said to be of excellent quality. Unfortunately, only a small quantity of milk was available. The creamery equipment was transferred to the Matanuska Experiment Station in 1933 and was operated by that agency for two years.⁷ Throughout its operation, the creamery ran at a loss and finally was discontinued in 1935. Cream was then being supplied by only three farmers.⁸ Perhaps in time the creamery would have proved highly profitable but advent of the Matanuska Valley Colony Project in 1935 changed the entire agricultural picture.

According to M. D. Snodgrass, there were 172 settlers residing in the Valley in 1923 when he assumed his duties as Superintendent of the Matanuska Station. During his employment he recorded an additional 12 permanent residents. In 1929 only 58 farmers, 12 of them married, were actively farming in the district.⁹

One other project was under consideration during this period. As early as 1922 the Governor of Alaska suggested, "A colonization plan to be operative in connection with the Alaska Railroad, with priority rights to lands freely granted to Alaska soldiers of the World War and their dependents".¹⁰ Capt. Hughes of the Stores Department of the Alaska Railroad stated in a speech to the members of the Matanuska Valley Settlers Association on March 14, 1924, "...each adult farmer (is) worth about \$700.00 a year to the railroad. Enough of (that) kind of farmer would make this railroad pay".¹¹ By 1929 plans were finally completed for a railroad colonization project. M. D. Snodgrass left his position as Superintendent of the Matanuska Station to assist the Alaska Railroad as its colonization agent.

Agriculturally, the Valley was in a period of transition. By the end of the decade the Experiment Station had gained some information on growing seasons. Experiments with grains, livestock, potatoes and other garden vegetables indicated roughly the types of farming best suited to the Valley. Potatoes still remained the most important cash crop; however, dairying was becoming established as a minor secondary source of cash income.

More machinery had been brought into the Valley. Tractors were beginning to replace horses as a means of power. A few trucks were in use, although there were only five or six automobiles in the entire Valley.

Alaska's future looked bleak following the market crash in 1929. A depression was the natural aftermath of this national calamity. For those who resided in the Matanuska Valley there was no reason to leave Alaska. Unlike the preceding decade, employment was not available in the States, even if one had wanted to leave. Others had no desire to abandon their efforts because they had fallen under the spell of the country. A certain stability had finally been achieved.

Throughout its operation, the creamery ran at a loss for two years. It was discontinued in 1935. Cream was then being supplied and finally was discontinued in 1935. Perhaps in time the creamery would have proved highly profitable but advent of the Matanuska Valley Colony Project in 1933 changed the entire agricultural picture. According to M. E. Snodgrass, there were 173 settlers residing in the Valley in 1933 when he assumed the duties as Superintendent of the Matanuska Station. During his employment he recorded an additional 15 permanent residents. In 1939 only 88 farmers, 15 of them married, were actively farming in the district.

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Chapter VII - Agriculture, 1930 - 1935

H. W. Alberts, director of the Alaska Agricultural Experiment Stations, wrote in 1927:

Potatoes are grown in both the Matanuska and the Tanana Valleys, but the market is limited to Alaska. Freight rates prohibit marketing to the States. The many and varied duties of the farmer make it difficult for him to grade his potatoes according to the market standard, and the purchaser who lives at a distance and buys directly from farmers has little assurance as to the quality of the product he will receive. Some system of cooperative marketing is needed permitting dealers and commission merchants who handle the products for market to inspect and grade the crop carefully according to approved standards. Such a system would enable the farmer to sell the portion of his crop which conforms to the standard, obviate the necessity of his finding a market, and permit him to devote considerable of his time to other farming pursuits.¹

Transportation problems have always troubled Alaskans. Residents of the Interior felt that freight rates would be drastically reduced when the Alaska Railroad was completed. This was not to be the case. Valley residents recall that in some instances freight shipped to Anchorage from the Palmer siding cost less than freight shipped from Wasilla although the distances were the same. In another case it would have cost a Fairbanks shipper \$9.80 to ship a breaking plow from Seattle but \$61 from Matanuska. These conflicting conditions existed throughout the Railbelt.

The volume of freight on the Alaska Railroad seldom paid operating expenses. This was one reason why it was necessary to establish high tariffs. Contrary to popular belief, the Alaska Railroad tried to adjust some rates, especially on agricultural freight. Furthermore, the administrators of the Alaska Railroad often co-operated with farmers in marketing their produce. As Alberts pointed out, however, a system of "cooperative marketing" was needed.

Unfortunately, farmers of that period were unable to work collectively in solving their problems. Two attempts made by the Valley settlers before 1930 to band together for mutual benefit met with failure. Dissension among the members and the fact that many were only part-time farmers further aggravated the problem of pulling together.

It is plain to see that not all fault for the agricultural doldrums lay with Anchorage merchants and the Alaska Railroad. Conduct and methods of a few unscrupulous farmers seriously affected the market of all Valley residents. Because there was no way to grade vegetables or any official to enforce a set standard for them, each farmer sacked his own produce for marketing. One "sharp" method used by less conscientious farmers was "stove piping".

"Stove piping" was particularly effective for potatoes and carrots. The method was simple. First, a stove pipe was inserted into a sack. This was then filled with culls. Good potatoes or carrots were placed around the stove pipe and it then was removed and the sack was filled with fine-looking produce. Naturally, such methods were resented by the merchants and they retaliated with low prices or would buy locally from only a few trusted producers.

A story was circulated about this time that Alaskan-grown vegetables and potatoes were of poor quality. Actually, quality of the vegetables raised in the Valley was generally superior to Stateside produce when it reached the stores. But the story persists today although it has no foundation in fact.

These situations faced those who came to the Valley from 1929 to 1934. M. D. Snodgrass states that a total of 55 families came to the Valley under the railroad settlement plan. Over 12,000 applications and inquiries were received concerning the Alaska Railroad Colony project. Of these, Snodgrass personally interviewed 600. The stock market crash and ensuing depression caused many candidates to decide against moving.

Special transportation rates were offered settlers coming to Alaska. These special rates applied only to the settler, his household goods, his livestock and his farm machinery. New machinery took the same rate as second-hand equipment. Information was available to home-seekers from several offices maintained by the Alaska Railroad in the States and in Alaska.

A brochure published in 1930 gave general information concerning the two major agricultural regions in the Tanana Valley and the Matanuska Valley. It suggested that prospective settlers should have minimum capital of \$2,500 per family available for living expenses during the first year.² This amount, of course, was to be provided by the settler. The Alaska Railroad furnished a tractor and operator for clearing land in the Matanuska Valley.³ The Matanuska Experiment Station furnished a heavy breaking plow to tame the cleared land.

New settlers during this period found the beginnings of a farm community. The Valley had the appearance of a wilderness broken here and there by homesteads. A crude system of roads already connected the towns and communities. They were narrow, winding and often virtually impassable during wet weather. However, they were important transportation links and were the basis of the present system.

High freight rates were considered to be beneficial by some Valley residents since they served as a tariff barrier. This barrier partially offset high production costs and allowed competition with Stateside products on a more nearly even basis. The available markets were Anchorage, Matanuska, Wasilla, Talkeetna, ARC road camps and the ARR commissary. Several farmers had managed to work out individual agreements with certain Anchorage merchants to handle their produce.

Storage of root crops was a problem to many of the farmers. The stores in Anchorage preferred to buy produce as it was needed. In 1933 Col. Ohlson repropoed to the settlers a plan to build a root cellar accessible to the railroad. The railroad wanted the root cellar near the tracks so that produce could be shipped during the fall and winter seasons.

A community meeting was held and an organization formed. Charles B. Wilson was elected president. Among those who attended the meeting were the two Grow brothers, Mads Johanson, M. D. Snodgrass, Henry Harrison and Victor Falk.

Members were to donate logs and build the cellar on railroad property about where the ARC is now located in Palmer. Several logs were cut and dragged to the location but the organization fell apart and the cellar was never built. The logs were eventually given to the Colonists in 1935.

Farmers formed another organization in 1933. Its first meeting was held at the Matanuska Experiment Station. This group was called the Matanuska Hall Association. The Association secured lumber from the old government mess hall at Eska to construct a hall at Matanuska. The Association was taken into the Grange in 1934 and today is Northland Pioneer Grange #1.

The only existing building at Palmer in 1930 besides the homesteads was the railroad freight room. A siding was used for shipping coal. A petition was circulated in 1932 to make Palmer a voting precinct and thus eliminate the trip to Matanuska. Thirty signatures finally were secured and the Palmer voting precinct was formed.

By 1930 the best farms could be had only through purchase. Land still available for homesteading was either infertile or inaccessible. A few farms that have been cultivated continuously are those of Harold Thuma, Victor Falk, Sr., P. N. Johnson, John Bugge, Snodgrass and Newcomb, Kircher and Minck, Mrs. Adam Werner and Joseph Kircher.

Thuma came to the Valley in 1930 and was employed as an instructor in the government school at Eklutna. He bought his present farm from Al Walters. Ross Heckey had homesteaded it originally in 1916. At the time of purchase by Thuma, over forty acres had been cleared. This was considerably more than was average for the farms of that period.

Another homestead still being actively farmed is that of P. N. (Pete) Johnson. He first came to the Valley in 1915 as a freighter for the railroad and also used his teams for land clearing. During the 1920's he freighted coal from the mines along Moose Creek to the railroad spur and hauled blacksmith coal from Chickaloon to the railroad branch line. Eventually, Johnson purchased his present farm from Oscar Anderson who had cleared only ten to twelve acres. Besides his farming and freighting operations, Johnson also operated a sawmill and sold his lumber to the mines.

The first farm in the Butte area was developed by John Bodenburg, who homesteaded in 1917. Bodenburg acquired several pieces of machinery among them one of the first cultipackers in the Valley. When the old wooden bridge spanning the Matanuska River was torn out and a cable put across, he lost interest in farming. Removal of the bridge made fording the river necessary to reach the railroad spur at Palmer. In 1934 John Bodenburg died and his place was purchased by Victor Falk, Sr., from a sheriff's sale.

Falk, in company with Jim and Bill Grow, had arrived in Anchorage in 1931. There they met M. D. Snodgrass who told them of the Matanuska Valley. Upon his recommendation they located here. Falk's original intent was to start a fur farm. With this in mind, he located a homestead in section 12, township 18 north, range 1 east, along Wasilla Creek where the beaver were still quite plentiful. Using a team of horses, he cleared a total of four acres and secured patent under the veterans' rights. The fur market collapsed right at this time and Falk turned to full-time farming.

During 1931 he worked for the Experiment Station and for the East Side Dairy in Anchorage. For the next two years, he farmed Oscar Anderson's place, later acquiring a 160 acre farm from the Bodenburg estate. He

also purchased 40 acres adjoining his farm on the west from the Alaska Rural Rehabilitation Corporation. He started his present dairy herd with two cows purchased from the East Side Dairy. At the time he moved to the Bodenbug homestead, he had a total of nineteen in his herd. To move his herd across the Matanuska River, he forded the river just below the present highway bridge.

Falk recalls that fresh meat was a luxury. Before the Colonists came, what meat he butchered was sold in Matanuska. O. O. Krogh, who operated a store there, weighed the meat for him and most of it would be sold almost immediately. Falk seldom retained enough for his own family.

Emil Kircher came to the Matanuska Valley in March 1931 bringing with him a truck. Information received from M. D. Snodgrass prompted him to settle in the Valley. Through O. O. Krogh, he purchased a 320 acre farm with about ten acres cleared from the Nicolas Nickelson (Nakleson) estate. Later he purchased 80 acres more. At present he has 120 acres cleared and 80 under cultivation. His brother, Joseph Kircher, arrived the following year and purchased 160 acres from Ben Marino.

To supplement their farming income, the Kircher brothers found employment elsewhere. Emil worked at the Experiment Station and in Anchorage. Joseph worked for many years for the ARR. Originally, Joseph Kircher was a bricklayer, a trade which he still exercises on many Valley construction projects.

Most settlers of that period 1929-35 possessed some capital and some knowledge of agriculture. Farms they developed are among the finest in the Valley. They had received some help in locating places and in getting started. Assistance of another form came with the advent of the Matanuska Valley Colony sponsored and supported by the Federal Government. The Valley and Valley farmers entered another era.

Chapter VIII - The Matanuska Colony, 1935 - 1948

Low-hanging leaden skies pressed about the colonist-loaded St. Mihiel as it steamed slowly up Resurrection Bay and docked at Seward. The first contingent of Matanuska Colonists from Minnesota set foot on Alaskan soil May 6, 1935. They were a weary lot. Tired anxious mothers, fretful children and worried fathers began facing realities of their Alaskan adventure.

For weeks they had been in the public eye. They had participated in parades, feted by dignitaries, met by bands, and even convoyed by battleships of the U.S. Navy. Now they were anchored in a small bay in remote Alaska. Cold winds whipped the icy rain across decks and against the portholes. Through the scud could be seen towering, snow-covered, mountain peaks.

A hearty welcome by Sewardites partially offset the knowledge that five children aboard had measles--and their future homes were not ready. The inexplicable wisdom of the planners had routed temporary tent housing, supplies and camp laborers to Alaska on the North Star to dock at approximately the same time as the St. Mihiel arrived with the Colonist families. The families stayed on the St. Mihiel another two days while the laborers proceeded to the Matanuska Valley and set up temporary camp.

Early on May 9, the Alaska Railroad backed a train to the dock and the families were on their way again. For a half day they were treated to some of the world's most beautiful scenery along the route between Seward and Anchorage. At Anchorage they received their last big public "feed" and welcome by a city. After the dinner they returned to the train for the last lap of their long journey. At Palmer they were assigned tents to await further developments.

Colonists from Wisconsin and Michigan arrived about two weeks later and were crowded into the temporary tents with them. Many disappointments, disillusionments, and discouragements were to follow before the hardy families became self-supporting. Many families failed. A few stayed, made good and became leaders in the brave new experiment.

Reams of words have been written about the Matanuska Colony and about the Colonists. Impressions vary from glowing to glowering--from claims of eminent success and golden opportunities realized to those of socialism and sedition--depending upon the writer, his "angle" and the persons providing his information. Kirk H. Stone probably has made the

fairest, most realistic analysis of the Matanuska Colony during its early years (1935-48). He wrote in his summary:

The Matanuska Colony was an experiment worked out in an emergency... (It) has been an effective and generally successful experiment to increase permanent population in the Territory. In 1934 the Valley was a partly broken and isolated wilderness... 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 inhabitable 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.¹

The Colony Concept

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 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. The Alaska Railroad had encouraged settlement and trade in The Valley between 1929 and 1933.

The Colony's first administrative agency was the California Emergency Relief Administration (CERA). It was necessary to have some agency control the initial funds granted for settlement before the ARRC was formed. 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 to expedite purchase of supplies, equipment, and food for the project. This purchasing function may have overloaded the CERA. At any rate, 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. This administrative arrangement was responsible for the uncoordinated and unexpected arrival of materials and food in Palmer--an ill-timing which was criticized long and loud by nearly every person in The Colony.

In addition to the CERA, the board incorporating the Alaska Rural Rehabilitation Corporation in Juneau and the FERA officials in Washington, D.C. participated in the overall administration of the Colony early in 1935. Each issued orders, occasionally contradictory, to the man in charge in Palmer; the result was an intolerable situation. Direction of the Colony was to be the function of the ARRC, better known as the Corporation. The ARRC was incorporated on April 12, 1935 under the Alaskan laws relating to charitable agencies. It was to be a non-profit corporation, given broad powers to operate anywhere in Alaska 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".

Eleven other objects and purposes in the Articles defined specific powers by which the corporation was to accomplish its primary objectives. Express provision was made that the statements shall not be considered to restrict the Corporation's power in any manner.

The Matanuska Colony was established for three purposes: (1) to take people off, or to keep them off, relief as a result of depression in the United States; (2) to demonstrate whether or not Alaska provided a settlement frontier that could absorb excess population; and (3) to add greater support of the Alaskan economy by production of more locally produced food which would lessen dependence on costly and vulnerable waterborne transportation. It was a spur of the moment idea, carried out in the urgency of the times. Its implementation was hampered by the serious absence of all but the most rudimentary knowledge of natural conditions in the settlement area. Advice of administrators on the job often was ignored by the Washington administrators planning and expediting the program.

The Land²

It is not generally known that homesteaders had owned most of the better lands in the Matanuska Valley for 20 years before the Colony was founded. Persons familiar with the Valley during that period reported that 117 families were living here in 1934. Their holdings amounted to 23,000 acres of which about 1,000 had been cleared and cropped. Most of this cleared land lay west of the Seward Meridian, but some of it lay in or adjoining the present site of Palmer.

The ARRC optioned more than 7,500 acres during the spring of 1935. Attempts were made to buy all homesteaded lands in the withdrawn area for Colony purposes. Tracts having land already cleared were highly desirable. But some homesteaders were unwilling to sell for the prices offered. Actually, outside the land along Palmer siding, utilized for the original camp and later for the community center, only about 175 acres of cropland were available to the colonists. (It was really the crop year of 1937 before any appreciable acreage was to be available for cropping.)

Between 1935 and 1938 the Corporation bought 7,780 acres from private owners for \$48,814. Prices ranged from a minimum of \$1.24 for unimproved tracts to a maximum of \$36.42 per acre where cleared fields and buildings were involved.

Land even was purchased from the Federal government. A deed and Patent No. 1120981 were issued on May 27, 1946 for 5,083 acres. This land cost the Corporation \$12,248 or a range of \$1.25 to \$4.00 per acre. Purchase was made to acquire title to tracts allotted colonists from government-owned land under Executive Order 7416.

The Corporation received no free land. Privately owned lands (7,940 acres) and public domain (5,083 acres) totalling 13,023 acres cost \$67,063 or about \$5.15 per acre.

Settler Selection

About 75 percent of the selected colonists were disadvantaged families from the Cutover Region of the Lake States. Not all settlers for the project were on relief, although the relief load was extremely high in this region during the depression. The planners theorized that the climate and farming conditions of this area were not too different from those of the Matanuska Valley. Thus the relief load could be reduced in the States by transferring families to a similar area in Alaska.

The remaining 25 percent of the colonists came from areas adjoining the Cutover section of Minnesota, Wisconsin and Michigan. One family from Oklahoma was the only exception in the first selection.

Everyone agreed that the Matanuska Colony was to be an agricultural community. Plans called for an agriculturalist to select suitable families for the experiment. Don L. Irwin, the Agronomist in charge of the Matanuska Experimental Farm for the University of Alaska, was selected for the job and during the winter of 1934-35 he began setting up standards he would use. This process was too slow for the program and eventually qualifications for settlers were established in Washington, D.C. during March, 1935. Orders were cut in Washington directing relief and social workers in the county offices to recruit families for Alaska. Colonist selection was made during the following five or six weeks. This time-urgency coupled with the relief aspects of the program and the lack of knowledge concerning Alaskan conditions caused some of the poor selections. A list of specifications was supplied to case workers, but it was so general that much leeway remained with the selectors. Possibly the greatest problem lay in finding families suitable to conditions neither they nor the social worker knew much about. A poor job of screening applicants during the initial stages of the program caused many later difficulties.

Between March and June 1935, 202 families including 903 persons were selected, processed, and shipped on their way. Bands played, speeches were made, parades were held. Some colonists gained the impression that their worries were all over. They learned differently during the weeks and months ahead.

Heads of families were supposed to have had farm experience. Other trades and crafts were to be considered in the selections, but these were extra dividends. When the smoke had cleared and the selections were analyzed, 10 percent of the original colonists had no farming experience; 26 percent had none or less than 6 years and about 40 percent had none or less than 10 years of life on a farm. Some of them had not had farming experience for 10 years or more prior to 1935.

Michigan selectors made the poorest choices with respect to farming experience. Minnesota selectors made the best. Minnesota had the highest and Michigan the lowest percentage of original colonists still living in The Valley after 15 years of the program.

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

Colonists arriving
at Palmer, May 10
1935



Camp scenes at Pal-
mer on morning of
drawing for settler
tracts.

Construction crew
for the Matanuska
Colony.





Palmer, Alaska,
September 4, 1939.



No. 20. Felton's General Store and Palmer Post Office, 1935



No. 22. Palmer Alaska, September 4, 1939

selections included some families who were not receiving financial aid from the government. Probably less than 10 families had assets worth \$800-1,000 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", 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.

Home is a Castle

The Colonists lived in tents at Palmer siding for about two months after arrival in the Valley. By late July 1935 most families had been moved to outlying tent camps in the general location of their allotted settlement tracts. Some of them lived in these camps until their homes were available for occupancy before the coldest part of the winter. The interiors of many homes were not completed until mid-summer of 1936.

Colonists were allowed to chose their homes from a selection of five sketched out tentative sets of plans drafted in Washington, D. C. These sketches were adopted without further study. These "suggested" plans were a source of embarassment to the architect and an irritant to the Colonists who were not allowed to combine desirable features of two or more designs. They could not have full basements or a full foundation on the ground. Although many colonists were experienced carpenters, masons, plumbers or other artisans, they could not work on their homes. Transient relief workers were brought in from California to do that work.

Construction of the barns lagged. Only one plan was available. Each was 32 feet square, 32 feet high and had a "hip" roof. The walls were logs to 10 feet above the ground and then siding to the roof. All were built on small pilings of native spruce which soon rotted away. The colonists complained from the start that the barns were too small, inefficiently partitioned, drafty and poorly built. The criticisms were apparently justified. Dairymen going into Grade A production had to spend large sums to make their barns usable. Some families sold

their outbuildings. Many others have abandoned their barns and have allowed them to rot away—a complete loss and temporary monuments to regimentation.

Well drilling lagged also. Reasons for this lay in the emphasis placed on building the Community Center in 1935 and 1936 and also in the difficulty of finding water.

The entire building program was poorly planned and poorly executed. Costs mounted to over double the original estimates. Inefficiency, waste and discouragement were common and served to discourage many families. By July 1936, 67 families of the original colonists had been sent back to the States soured on Alaska and on the Project.

Settlement Experience

Conditions of colonization were set forth in the Settlement Agreement between the Colonist and the Corporation. The agreement provided free transportation to Alaska for the family, food and clothing during the orientation period, at least 40 acres with a set of farm buildings, and funds for further improvements. Interest rates were not to be over three percent and interest payments would begin in September 1938—three years after settlement. Payment of installments on the principal real estate loan would start in September 1940.

Some of the colonists began planning to leave immediately upon their arrival in the Valley. Confusion reigned. By July 1935, after less than two months of living in The Colony, the departures began. By March 1939, 537 persons in 124 families (61%) had left; but half as many arrivals and more births than deaths kept the total population over 700 colonists. The reasons given for leaving to some extent reflect 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.

All of the original colonists who left The Valley were encouraged to return to their homes in the States. Some did this but a few located in the Pacific Northwest. More than half of the families were living in places unknown to persons still in The Valley or to the personnel of Alaskan post offices in 1948. At least 37 families remained in the Territory and 31 went to the Anchorage area from The Valley.

All of the replacement colonists were selected until about 1940,³ Approximately 80 families were chosen in these six years. Selection was by the ARRC administrators after persons desiring to join The Colony had filled 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 about 25 percent were in the three West Coast states and Montana. The rest were in 11 other states 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.

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 came to The Valley.

At the end of 1948, 63 families, about a third, of the original colonists still lived in The Valley. While the average farming experience of these families in 1935 was 15 1/2 years and 35 have remained on their original tracts, only about 12 families had 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 persons in 1935, the younger colonists, also represented a low percentage; otherwise, original family size up to 10 persons had about the same percentage relationships to total families in 1948 as in 1935.

Farm Development Problems

Plans were developed for locating 208 families on tracts throughout the reservation.⁴ These were divided into 144 units of 40 acres each (69%), 52 of 80 acres (25%) and the remaining 12 (6%) were held for possible later use. Most of these 12 were on the northern edges of settlement in rough country and still are unused.

Problems of farm organization became apparent even before all tracts were occupied. Administration of the "cooperative rural community" was inconsistent with physical conditions in Alaska and with American tradition of initiative and enterprise.

Forty acres of tillable land may be ample for fruit, vegetable or poultry farms. This size often is suitable for part-time or retirement farms if ample opportunity exists for non-farm income. None of these conditions existed in the Matanuska Valley at the time of colonization. Few of the 40 acre tracts were completely tillable.

No competent detailed soil survey was available as Colony tracts were being laid out. Many of them, consequently, contained less than 50 percent tillable land. Many others contained land that must be left wooded to protect open fields from erosion by winter winds. Possibly the saddest development of all occurred when colonists discovered that their best hope for success lay in development of commercial dairy farms. The Corporation began combining tracts even before all housing units had been established. By 1941, 37 tracts had been enlarged by addition of parts or all of adjoining tracts. The process of combination has continued and is one of the major problems facing farmers who want to expand their holdings to economic size.

In areas where tracts were clustered together, forming solid blocks, it is practically impossible to enlarge farm units. The situation is particularly acute south of Palmer and in the Butte area.

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 land clearing program was held up in 1935 and 1936 in favor of the construction program. Once clearing was under way in 1937, it proceeded slowly in spite of three programs to stimulate the work and the cost was more than originally anticipated by the planners.

Farm budgets prepared for The Colony indicated that families were to work half an acre in a community garden the first year. They were to slash the timber and have cleared for them a total of 8 1/2 acres in 1936, 11 1/2 in 1937, 15 1/2 in 1938, and 19 1/2 in 1939. By November 1936, there was an average of 4.8 acres cleared and 1.0 acre slashed on 167 developed tracts. This average was only about half the progress that had been hoped for. A series of Supplementary Land Clearing programs then was instituted. The goal of 15 acres cleared per farm was raised to 30 acres and substantial incentives were offered settlers for work at slashing and clearing land.

By March 1940, even after three land clearing programs, only 3,926 acres were tillable. This amounted to an average of 23.5 acres for each of the 169 developed tracts. Only about 400 more acres were bulldozed by August 1941.

The Colonists became increasingly indifferent 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".

On the other hand, study of individual family accounts and records on file in the archives of the Corporation disclose that the situation must have been desperate and almost hopeless for many conscientious people about 1940 and 1941. Cropland had not been made ready in proportion to livestock numbers, work for cash was insufficient to meet needs, markets were poor, debts were mounting. Records of livestock inventories show that several families lost ground yearly with their livestock. Each year their inventories were less than for the previous year. Many of them became discouraged after three or four years and finally left The Colony or were forced out by management.

The Corporation has had six general managers during its 20 years of existence. Don L. Irwin, the first manager in 1935, served again in 1945-47. Ross L. Sheeley also served at two separate times. These two men together with James J. Hurley, the present manager, are the only ones who had previous Alaska experience.

Rapid changes in management, directives often contradictory, inexperienced administrators and discontented colonists made for many strained situations. Relief officials in Washington were loath to allow the Board of the ARRC to set policies for administration of affairs locally. Personality clashes occurred frequently. Many of these could have been prevented if certain managers had been students of human nature.

A "get tough policy" was adopted after 1940 just when several potentially good farmers most needed leniency and understanding. Two types of examples are: One family had purchased young livestock and raised it to where it would be producing an income within a few months. Their work record was good, their farm plan was in order so far as the family could make it. Their cash income was insufficient for them to stay current on interest installments. They needed a little more feed and a few more months before they could begin to make payments. They asked for an extension of time and for a small additional loan to carry them until their livestock would be producing an income. They were rebuffed.

The second family had a few hens and had the opportunity to buy a good flock of pullets at bargain prices. They indicated that the supplemental flock would enable them to make substantial payments--if they were helped to finance the purchase. They already had part of their feed.

Both colonists received a form letter as follows:

In regard to your request for another loan from the Corporation, we are willing to give your request full consideration, but such consideration must be upon the following basis:

- (1) overdue payments on the 1941 loans must be paid in full;
- (2) the loan must be covered by adequate security;
- (3) an agreement must be executed that you will make regular periodical payments to repay this loan as promptly as possible, and to pay upon other debts due the Corporation.

Neither colonist received an additional loan and both left The Colony during the next few months. However, in spite of such unfortunate examples, most of the managers made sincere attempts to help the colonists progress and The Colony grew.

By 1941, many of the colonists were becoming worried about making their first payment. Some felt the need for expensive barn improvements to quality for Grade A milk rating. 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 showed that about 5,500 acres were cleared in The Valley in 1941, of which perhaps 4,500 acres were in colonists' tracts. 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. After the war, from 1945 through 1947, the Corporation made a strong effort to complete its obligations under Supplementary Land Clearing Contracts. This work was nearly finished in the summer of 1948. By that time, there were an estimated 8,500 cleared acres in The Valley. In addition to the corporation three private operators did land clearing work in the area. The major concentration of cleared land was on the flat lands north and south of Palmer and around Bodenbug Butte. A minor concentration was on the flat and gently sloping lands about two miles northwest of Matanuska Junction. The additional land cleared was primarily an expansion on colonists' tracts that were developed in 1941.

The development of cropping was predicated on having cleared land available. However, farming lagged even after land was available for

cropping and in spite of the repeated reminders by Colony administrators that colonists must eventually depend on the soil for their livelihood. The lag occurred because many colonists were inexperienced farmers. They welcomed opportunities to work for good wages in the construction boom that accompanied the preparedness effort in the Anchorage area. Many of them could see no way to meet the high indebtedness charged against their holdings unless they worked away from home. Many preferred other occupations to farming.

In view of the colonization history, step by step, it is significant that few people of The Valley were full-time farmers after nearly 15 years of effort--even though the area included the largest area of cropped and cleared land in Alaska.

The growth of farming after colonization was marked by two agricultural changes. 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 his own use and for sale. The colonists also were subsistence farmers at first. However, as cleared land became available the tracts were turned quickly into sources of subsistence and cash income. The tendency towards commercial farming continued 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 agricultural development.

It was not expected that the colonists would become specialized commercial farmers. They were to be self-sufficient general farmers. The 40 and 80 acre tracts were to be the basis for specializing in truck crops or dairying by the end of 1939. The results of a survey made in 1940, by employees of the Corporation, show that general farming was predominant and that specialization was starting. The 118 tracts being farmed in 1940 were classified as follows: 83 general farms, 9 dairy farms, 6 truck farms, 2 poultry farms, 1 sheep farm, and 17 unclassified farms. From 1940, dairying continued to grow in importance until by 1948 there were 38 Grade A dairy farms. Truck farming had increased slowly to prevent seriously glutting the market at time of harvest. However, commercial farming was beyond the hopes of The Colony's original planners. It has been estimated that perhaps 50 farmers, mostly dairymen, were full-time operators by 1948. The remainder derived part of their income by working for Federal or Territorial agencies and as individual contractors.

Marketing

Estimates of the potential market for farm products were based on shipments to Alaska. They were an unrealistic basis for a permanent economy. Anchorage, the only "urban" area that could be considered a market had a population of about 2,000 in 1935. It had grown to 3,500 by October 1, 1939. If the original plans for development had materialized, serious overproduction inevitably would have developed.

The colonists had little surplus produce for sale before 1943. Gross sales from the Valley in 1941 were \$304,000, in 1942 \$219,000 and \$370,000 in 1943. Farm products sold in 1948 amounted to \$1,120,500. Continued growth of Anchorage and the military bases provided a ready market for all surplus from The Valley.

An Expensive Experiment

The settlement experiment was expensive. Financing was complex, costly and inefficient. Over \$5,400,000 of grants were charged against The Colony. This and similar figures have been widely quoted as representing a "gift" to the Colonists of the Matanuska Valley. Little consideration is given that the \$5 millions plus includes such items as \$648,466 to the Alaska Road Commission for roads and bridges and \$716,907 to the California ERA for relief laborers who were sent to Alaska to do work the Colonists should have done. The cows and horses purchased by Montana and Wyoming relief agencies for over \$34,000 were high priced. Much of the outfitting expense incurred in Michigan, Minnesota and Wisconsin was spent on poorly suited supplies. A fire and poor record keeping combined accounted for another \$313,000.⁵

The construction and land clearing programs lagged and added to the non-productive expenses. Several families were poor managers and went into debt for goods they did not need. Others contracted development expenses on the assumption that cropland would be tillable on time. When the cropland was not available as promised, these families were forced to change their plans. This often resulted in costly adjustments and usually in frustration.

The colonists were told their debt to the Corporation would be \$3,500 or less. Within two years their debts approximated \$10,000 with many running higher. Dissatisfaction and discouragement at this situation was so strong that a debt readjustment program was instituted in late 1937.

The formula for debt adjustment was complicated. Charges were made that the adjustment program penalized persons who had been paying on debts or had held indebtedness low. Those persons with the highest

debts received the largest adjustments to allow a reduction of all accounts to less than \$8,000. Over \$1,137,000 of colony costs appear to be chargeable to the debt reduction program.

In January 1941 the colonists requested postponement of payments on realty contracts until November 15, 1942 to allow them time to become current on short-term loans. This was granted to all colonists who were making payments and allowed them to liquidate overdue indebtedness for seed loans, special notes and chattels.

Payments were begun on time in 1942, but adjustments on methods of repayment often were necessary during the next several years. Several families borrowed additional funds in 1941 and 1942 for remodelling barns to qualify them for Grade A milk production. These barns had been constructed less than 10 years at the time and were still another irritation to families trying to live with the Project. The poor design of these buildings cost \$30,000 in mortgage notes to the few dairymen involved during those two years alone. Expensive remodelling ultimately was necessary on nearly every barn in the project that was used for practical farming.

In spite of a slow start and the innumerable growing pains within the Colony, by 1948 from 70 to 75 percent of realty payments were current or not more than one payment behind schedule.

Old Settlers Loans

In 1934 and 1935, as plans were being formulated for The Colony, several Valley homesteaders hoped they would be able to borrow funds or join in the benefits of the government program. However, no consideration was given them in the organization. This neglect caused hard feelings and a definite rift between the "old settlers" and the newcomers.

Several oldtimers brought pressure through channels and in 1936 approval was granted for the Corporation to divert \$25,000 for non-colony loans. Definite discrimination continued. The funds were dispersed on only 20 loans of less than \$2,500 each between September 1936 and February 1937. No credit was extended at the Trading Post and settler loans were repayable in 10 years compared to 30 for the colonists.

The repayment history on Old Settler loans was good. Well over 90 percent of them were paid back when due. It is interesting to speculate whether agricultural development of The Valley would have been more rapid, less controversial and less expensive if the colonization program had been keyed to assisting residents and volunteers rather than the program that was followed.

In Retrospect

The Matanuska Colony was developed during an emergency period and under bizarre circumstances. A national emergency relief program obviously was not the best vehicle for a settlement experiment. The experiment was conducted with nearly all the ingredients as unknowns. It was complicated by some administrative decisions and actions obstructive to smooth development. It may not have been a case of the blind leading the blind—although many times it seemed so.

Kirk Stone says of the period:

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...

Several persons in the National Administration exercised strong control over many phases of colonization. Colonists complained that 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.

Surely, many mistakes were made! Money was spent unwisely! Settler selection was hurried and fumbling! Government controls and the pioneer spirit make strange bed-fellows. But, adversity was unable to defeat the program.

Nearly 200 Colonist and replacement families stayed in Alaska. A very fair proportion of them remained on the land and gained a part of their living from agriculture and allied industries. This nucleus was the catalytic agent that drew additional families into the Valley.

About 7,500 acres were cleared for cropping under the impetus of the program. Probably at least 6,000 of it was being cropped in 1947-48. Residences and outbuildings were available for families that needed them. A marketing organization was available and a market was being developed. The highway system had been improved and expanded to bridge the Matanuska and Knik Rivers and people could move about. The nucleus for a trade, business and social center at Palmer had been established.

Agricultural products sold increased in value from less than \$100,000 in 1940 to \$1,120,500 in 1948. Production from this experiment amounted to over half the Alaskan agricultural products sold in 1948. The Matanuska Valley forged ahead during a very trying period in Alaska.

Perhaps the most valuable contributions from the experiment were: the hard-earned knowledge of agricultural conditions in Alaska, the experience in administering the movement of people and taming the land and a focussing of the limelight upon the production potential of sub-Arctic Alaska.

PART III - PRESENT DAY SITUATION

Chapter IX - The Era of Scientific Development, 1948 -

Early each year a warming sun quickens the blood of tractor-mounted farmers. Churning forth and back over dusty fields they till crops that will spring forth like Jason's soldiers from the furrow.

Alaska's short summer season is hectic. Crops accustomed to the more leisurely growth habits of southern climates grow rapidly during the long sunny days. Farmers grasp modern farming methods eagerly and use them vigorously. Commercial farming has reached Alaska. It is here to stay.

Casual visitors to the Matanuska Valley usually are unimpressed by the small farms, the irregular fields and the familiar livestock. A faint flicker of surprise that crops can be grown so far away from their homeland is the usual reaction.

Agricultural Experiment Station

Agricultural problems of Alaska have been under scientific study for nearly 60 years—since Congress in 1897 sent a party of three men northward on an agricultural reconnaissance.¹ Their favorable reports spurred Secretary of Agriculture Wilson to recommend further investigations the next year. Reservations for experimental purposes were made at Kodiak and Sitka late in 1898. Within the next seven years, additional reservations were made at Kenai (1899), Rampart (1900), Copper Center (1903) and Fairbanks (1906). The Matanuska Station was authorized in 1915. Development of farms and experimental work was begun at each of these stations. Headquarters were at Sitka, then Capital of Alaska.²

Varieties of fruits, berries, forages and grains from many parts of the world were tested. Some grew satisfactorily; others did not. Using the crude tools and methods of the day, these pioneer researchers created a storehouse of knowledge available and useful to settlers who were to follow. Names of Dr. C. C. Georgeson, G. W. Gasser, M. D. Snodgrass, J. W. Neal, F. E. Rader, H. W. Alberts and many others must appear on the scrolls of credit for developing scientific knowledge about agricultural conditions in the Far North. Dr. Gasser wrote of this period:

Much of the work was of a pioneering nature, a mixture of manual labor interspersed with some scientific work; a continuous testing of many plant introductions, with variation in technique, and a constant battle against vagaries of the weather in an unknown climate.³

The agricultural development program in Alaska suffered a serious setback during the depression and post-depression years. The Sitka station was closed in 1932. The Fairbanks station was turned over to the Alaska Agricultural College and School of Mines (now the University of Alaska) in 1931. The Matanuska Station was released to the College in 1932. Territorial funds for research were short; essential plot work could not be conducted; the flow of information useful to settlers nearly ceased.

Eventually, colonists and other farmers complained to Washington about the paucity of useful current information. Congress assigned a special agricultural task force in 1946 to investigate the situation in Alaska. Their report was not overly optimistic. They wrote:

Farming in Alaska was considered in the exploratory investigation as an auxiliary to military, transportation, mining, fisheries, forestry, and industrial development. Present and potential agricultural areas were examined to determine their extent, relative productivity, livestock requirements, ability to support population, prospective products, markets, and technical problems of development. The development of Alaska is important to the future welfare of the United States. Alaska will play an important role as a source of fish, minerals, and timber and as a base for world air commerce.

The greater part of Alaska is unsuitable for any kind of crop production. Where range might be adequate for grazing stock for a few months in the year, there is usually not enough associated land suitable for growing feed crops for carrying the animals over the winter.

The soil areas where agriculture can be carried on are small and scattered. Perhaps a rather large total area could be farmed if the United States were to become desperate for land. The task group estimates that there probably is not more than a million acres of suitable farm land, though much more might be developed if the local need for agricultural products should become critical...

...In the principal mainland areas--Matanuska, Tanana, and Kenai--agriculture consists chiefly of dairying and the production of potatoes and other vegetables, mostly on a limited scale as judged by standards of production in the States. Some mixed stock farming is in progress, principally in the Matanuska Valley, with hogs, poultry, sheep, goats, and a few beef cattle.

Most students of agriculture in Alaska with whom the problems were discussed, believe that farming is sure to continue and expand as a basic industry and that livestock must occupy a greater part in farming operations in the future if stability and success are to be achieved. Since only about 15 percent of the food requirements of the people are now supplied from Alaskan farms, there is abundant need and opportunity for production of animal food products. The centers of livestock population and the type of product marketed are in large measure the result of experience over many years. The local conditions, such as grazing land available, crops that can be grown, climate, transportation, and markets, have made the present situation what it is for the most part. It should not be overlooked, however, that new generations of farmers will come, and they may succeed where many of their predecessors have failed...

...Agriculture is fairly certain of steady expansion in areas where it is now on an established basis. Expansion beyond the better farming and stock-raising areas can be made in the face of greater problems and difficulties, but it will depend upon future population increases of greater magnitude than are now indicated...

...Agricultural research is urgently needed to develop basic information for the establishment and maintenance of a permanent and efficient agricultural industry in Alaska. Such information is necessary to guide new settlement, to help gardeners and part-time gardener-farmers in the towns and villages as well as in the country, and to provide a foundation for improving the living standards of the farmers in the Territory. These people do not have the great backlog of knowledge gained through experience and research that is available in the continental United States. In addition, there is a pressing need for sound, reliable information that can be placed in the hands of new settlers. Ill-advised and glowing accounts of Alaska, emphasizing its potentialities and omitting the handicaps, are encouraging many veterans

and other settlers to take up land of uncertain quality, often far from markets. Further, some of these people have had no experience in farming, either in Alaska or with crops adapted to the soils of Alaska. Settlement by such families, or by any families, on poor soil, can lead only to waste, disillusionment, and bitterness.

Some important testing and observational research has been done by the Alaska Agricultural Experiment Station, but there has been very little fundamental research that gets at the unique problems of the Territory. It appears that those researches should be emphasized now that are most critical and that can be conducted without extensive laboratories or other permanent facilities within the Territory...⁴

Congress accepted the Task Force Report, ordered the U. S. Department of Agriculture to resume research activities in Alaska and to operate the three Territorial stations.⁵ A strong program of research applying latest techniques and knowledge to Alaska's agricultural problems was begun.

Don L. Irwin, who had been superintendent of the Matanuska Experimental Farm and also manager of the Matanuska Colony during the previous 13 years, was appointed to direct the new and vitalized program. Headquarters were located in the Matanuska Valley. An office-laboratory building together with housing for key personnel was started on a tract of federally-owned land. It was located on the outskirts of Palmer due to legal difficulties of making federal investments on "state" lands such as the Territorial stations.

A program of expanded research in agronomy, soil science, horticulture and animal husbandry was started in 1948. This was supplemented in 1949 by addition of agricultural economics and agricultural engineering. Entomology was added in 1950 and plant pathology in 1951.

In 1947 the three Territorial stations were being operated by 8 men combining research, administration and often common field labor. Four years later, in 1951, there were 23 technical personnel in full-time research activities supplemented by 36 full- or part-time employees. The total budget for agricultural research in Alaska in 1946-47 was \$88,190 of which \$43,248.63 was non-federal.⁶ The budget for agricultural research in 1950-51 was \$550,714 of which \$183,432 was non-federal.⁷ Sales of farm products, indicating increased activity, had been increased from \$23,869 to \$40,499 and livestock inventories were increasing.

It was logical that the headquarters for agricultural research should be located in the Matanuska Valley. The Census of Agriculture for 1950 showed that the Third Division including the Matanuska Valley produced 62 percent of Alaska's agricultural income. The Commissioner of Agriculture reported that 58 percent of farm marketings in 1951 were from the Matanuska Valley⁸ and in 1952 that farm sales from the Matanuska Valley amounted to \$1,488,672 (or 54%) of an Alaskan total of \$2,763,166.⁹

Agricultural research in Alaska was conducted as a federal function from August 1947 to July 1, 1949 when it became a Territorial-Federal function under the joint control of the Agricultural Research Administration, USDA, in Washington, D.C. and the University of Alaska. This arrangement, still existing in 1955, is expected to continue until such future date as the Territory demonstrates its ability and willingness to pay the costs of a modern, effective research program in agriculture.

Placement of the research headquarters and key personnel in the Valley was locally advantageous. Not only were interested farmers free to observe the research under way, but technicians were available for consultation about farming problems. Farm management efficiency climbed rapidly. Production of whole milk in the Matanuska Valley increased from about 3,300,000 pounds in 1949 to 5,200,000 pounds in 1951. Egg production doubled in five years. Experiments with brome grass demonstrated conclusively that heavy applications of fertilizers were necessary for profitable yields of perennial forages. Experimental fertilization practices showed that the crude protein level of the grass could be increased to 18-24 percent and reduced or nearly eliminated the need for purchasing high-protein feed when adequate supplies of this fortified grass were available. New seedings of brome grass sprouted up on many Valley dairy farms. A survey showed 55 silos at the end of 1951. Numbers had nearly doubled during a 2-year period. More were needed; but dairymen needed additional cropland for silage production before they could use more silos.

The improved forage production program and introduction of field forage harvesters made short work of the laborious haymaking methods formerly practiced in the Valley. By 1952 or 1953, only one or two small producers still were staking hay and trying to get it dry between late summer rains.

Oats and peas are an important annual forage crop in the Valley. Where formerly they were tediously and wastefully bound, shocked and left in the field as hay until needed, most of this crop now is stored as grass silage.

Greenhouse experiments speed up the study of soils and plant food requirements



Forage crops grow well in Alaska. Fertilizer trails on old bromegrass stand at Matanuska Experimental Farm

Chemical analysis is the final test on field plot results in the Matanuska Valley.





First shipment of semen from Palmer to the Kenai Peninsula for the expanded artificial breeding program.



The Extension program shows dairymen how to utilize research findings to improve farm management.

These changes occurred rapidly. Already by 1950, five significant changes could be noted in farm organization:

- (1) a continuous increase in the proportion of cropland used for silage;
- (2) an increase in the proportion of cropland seeded to pasture;
- (3) an increase in number of dairy farmers growing grain, even though the acreage each farmer devoted to grain production has remained about the same;
- (4) a decrease in the proportion of cropland used for field-cured hay; and
- (5) a decrease in cropland used for purposes other than production of dairy feeds.¹⁰

Dairy farmers were taking forage production seriously. In 1947 dairy-men were using 76 percent of their cropland for oat and pea hay and small amounts of silage, brome hay and rotation pasture. By 1951, this proportion had been increased to 85 percent and more of their cropland was harvested as silage than as hay. Seeded pasture had increased from 15 percent to 25 percent of the cropland acreage during the five years and 92 percent of the dairymen were using it.¹¹

Land clearing for cropping purposes was averaging about 1,000 acres per year in Alaska. Half of this was occurring in the Matanuska Valley. Most of the acreage being cleared was on dairy farms where an average of 5.0 acres of feed crops per animal unit was used in 1952. But, in the meantime, dairymen had saved heifer calves and purchased additional cows. Livestock numbers again began pressing upon farm capacity to produce feed.

Milk production per cow increased from 7,200 pounds in 1947 to 8,870 pounds in 1952. Most of this increase reflected better management. But the artificial insemination and crossbreeding program of the Experiment Station (begun in 1948) was resulting in higher productivity of the crossbred heifers. By May 1954, records on 86 daughters showed that they produced 20 percent more milk and butterfat than their dams during the same period.¹²

Changes in dairying were matched by changes in other fields. Serious weed pests had been introduced into the Valley with shipped-in hay and

grain. Weeds were serious competitors for growing space and plant nutrients. The crop scientists made short work of several troublesome weeds through introduction and demonstration of weedicides. Cultivation of truck crops to control weeds almost became unnecessary.

Cutworms were a serious crop pest. It took only a few years to find fairly satisfactory controls for major outbreaks. Plant diseases were attacked by the plant pathologist. A Seed Grower's Association was organized to provide pure strains of crops.

Plant growers were busy testing strains and varieties of grains, forages, vegetables, potatoes, berries and ornamentals. Better varieties of oats, wheat, barley, potatoes, currants, clover and timothy were offered to Matanuska Valley farmers by 1955.

Housing research for man and beast had not been ignored. The need for and value of insulating materials was demonstrated and plans provided for new buildings. Hay and grain driers were designed and tested. Potato storage conditions were studied and several potato growers built new farm storage cellars.

While all these production advances were occurring, the economists were studying factors of farm efficiency, marketing methods, market potentials and settlement problems. The market was strong and Matanuska Valley farmers were busily increasing their productive capacity. Hopes were high that the Anchorage urban market and the Armed Forces would continue to be willing consumers of local farm products.

Research has proved that plants and livestock can be grown satisfactorily. Still better strains are being developed. The major unanswered questions remaining are whether production costs can be reduced to meet competition and where potential surpluses over local demand can be marketed.

Agricultural Extension Service

The Extension Service was organized in Alaska July 1, 1930. Mrs. Lydia Fohn-Hansen was the first assistant director of home economics and George W. Gasser was the first assistant director for agriculture. The first home demonstration club in the Valley was established at Matanuska in 1932 and reorganized in 1934. Ross L. Sheeley was appointed Director of Extension in 1931 and served until 1936.

Agent assistance was sporadic until the colonists arrived in 1935. Joseph T. Flakne was appointed district agricultural agent and Miss Ruth DeArmand (Mrs. Howard Estelle) became district home demonstration agent in April 1936. Except for short periods, agents have been assigned to the Valley since that date.

Home demonstration agents in the Valley have worked effectively with Homemakers Clubs and 4-H Clubs. In spite of ups and downs, limited budgets, changing personnel and a rapidly changing population, the program has gained strength with age. In January 1955 Mrs. Rideout, the current agent, reported 14 active Homemakers Clubs and 23 4-H Clubs organized or to be in operation during the year.

Nine agricultural agents have served the Matanuska Valley during the past 20 years. Some have been good men; some were mediocre. All, however, were seriously handicapped by the gross lack of specialized information based on local conditions. Their major funds of knowledge were their own training plus what they could observe of conditions around them. Relatively little aid came from the experimental work in progress.

This situation was improved slightly when the Experiment Station made its specialist staff available more or less on a volunteer basis in 1948 and subsequent years. Drain on their research time by calls for extension work were so great that six research specialists were assigned part-time extension duties on January 1, 1953. This number was supplemented as new employees were recruited. Sixteen men with specialized training in crop improvement, dairy husbandry, disease control, farm buildings, farm housing, farm economics, insect control and soils were available to Extension agents for consultation, advice and assistance in 1955.

Reorganization of agricultural activities within The University as of July 1, 1952 placed Dr. Allan H. Mick in the position of Dean of Agriculture, Director of Extension and Associate Director of Experiment Stations. This multitude of titles simply meant that agricultural efforts of the University would be coordinated for better use of funds and man-power. Greater emphasis was placed immediately upon the educational phases—getting results of research into active use on farms and in channels for marketing farm products.

The Agricultural Conservation Program of the Production and Marketing Administration also was made available to Alaska in 1936. The district agricultural agents administered this program at the local level. Although the sums available were small, much good was accomplished. Allocations for the Matanuska Valley are shown on the next page.

ACP Payments to Matanuska Valley Farmers, 1936 - 54

Year*	Number of farms	Payment	Year*	Number of farms	Payment
1936	19	\$ 157.00	1946	97	\$ 8,489.53
1937	113	2,015.09	1947	97	11,612.10
1938	39	1,011.40	1948	104	13,022.80
1939	153	5,894.00	1949	89	19,232.40
1940	133	5,589.89	1950	93	20,353.02
1941	119	6,560.50	1951	82	13,413.14
1942	105	6,424.50	1952	57	11,784.77
1943	106	9,404.15	1953	79	13,343.04
1944	73	5,891.20	1954**	--	7,861.67
1945	101	8,163.94			

* The year generally includes the calendar year, but varies somewhat due to the program. Small payment increase adjustments are included for the years 1945 - 53.

** Adjustment for 1954 was not available.

This program for Alaska was reorganized in December 1952 and put on a committee basis. Local committeemen are responsible for the local administration of this work currently called the Commodity Stabilization Service. Funds flow from this agency to the Matanuska Valley as they had before under the ACP. Payments to Valley farmers were \$12,954.06 in 1953 and \$7,861.67 in 1954.

The Alaska Department of Agriculture

The Territorial Legislature authorized employment of veterinarians in 1931. They were to help fur farmers solve nutrition and disease problems. Fur farming later became relatively unprofitable under Alaskan conditions and the veterinarians were shifted to major work on other tasks. They served for 16 years under the Governor's office before assignment under the Alaska Department of Agriculture.

The first resident veterinarian in the Matanuska Valley was Dr. Earl N. Graves. The Matanuska Valley Farmers Cooperating Ass'n. seriously needed assistance and was instrumental in getting him assigned here. Dr. Graves was employed by the Alaska Department of Agriculture from 1945 to December 1952. After Graves left the Valley, Wm. Sweetman of the Experiment Station helped dairymen doctor their sick cattle. In fact, local MD's were drafted at times to help save valuable cows. Dr. James Pazaruski who works part-time for the Department in addition to his private veterinarian practice arrived in 1953.

The Alaska Department of Agriculture was authorized by the 1945 legislature. It was established to provide leadership in promotional work, state quarantine and regulation supervision, state inspection and grade standards enforcement and other activities of a strictly local nature.¹³ Dr. George W. Gasser, of the University of Alaska, the first Commissioner, drafted its first regulations and developed a program before he reached compulsory retirement age. Commissioner Clyde Sherman continued these policies, expanded public relations and began an intensive program to aid sale of local farm products.

Effect of the program in the Valley, outside Dr. Graves work with livestock, was slight until a produce inspector (George Crowther) was stationed here in 1951. Crowther's grading and inspection program was largely responsible for closing the ever-present breach between potato or vegetable growers and military or civilian buyers. Establishment and enforcement of US grades and standards has brought satisfaction to consumers and profits to producers.

Commissioner James Wilson moved the Territorial office from Fairbanks to Palmer in 1953. This move was made to centralize activities and to locate the office near the greatest number of farmers. Commissioner Wilson previously had managed the Matanuska Valley Farmers Cooperating Association for two years and also had cooperative experience in Washington. He embarked upon a program of quality improvement, better packaging, market information, publicity and public relations. Rules and regulations for potato grading were revised in consultation

with the trade. Spot inspections now are made and rule infractions are reported to the persons responsible. Full cooperation by grocers and farmers alike has made prosecution unnecessary to date.

The animal health program has been effective in stamping out disease and in prevention of reintroduction. The last TB reactor in Alaskan cattle was found in 1950. The brucellosis eradication program has lowered incidence of this disease to less than the national average. Efforts are underway to eliminate it in the years immediately ahead. The inspector also examine incoming livestock and Alaskan grown meat for evidence of disease.

Available service to Valley farmers also is provided in the quarantine and pest control program. Imported seeds are tested for purity and germination, feed is analyzed and weed and insect infestations are being controlled.

Newest duties of the department are in farm finance. M. D. Snodgrass, representative from the Valley, and "Heinie" Snyder, Wasilla senator, successfully sponsored an Alaskan Agricultural Loan Bill (No. 44) in the 1953 Legislature. One million dollars for agricultural loans was authorized and \$200,000 was appropriated. The Commissioner of Agriculture was named administrator and a 5-man Board was authorized.

This Board first met at Palmer on August 3 and 4, 1953. At subsequent meetings they authorized loans for agricultural areas proportionate to relative agricultural activity and need. The Matanuska Valley was allocated \$50,000, the Tanana Valley \$50,000 and outlying areas \$40,000, for chattel and development loans; \$50,000 was earmarked for short term use without allocation by area and \$10,000 was reserved for short term use. The Matanuska Valley was allocated less than its prorata or value-of-production share of these loan funds on the basis that certain other monies available here were not at hand elsewhere in Alaska. Accounts receivable from the Valley on December 1, 1954 were \$65,862.77 or 38.3 percent of the \$172,007.89 outstanding. The repayment record on Valley accounts has been satisfactory.

Ninety loans were made, sixteen of which have been paid in full. As of December 1, 1954, 34 short-term, 21 chattel and 19 farm development loans were in effect. Under the program, five Grade A barns, five Grade A milk houses, and one small commercial dairy plant have been constructed. Six wells have been drilled, fifty-one cows purchased and over 250 acres of land have been cleared. Equipment has been financed for eighteen farmers, fencing, house and

building improvements have been financed on six farms, and operating loans have been made to fifty different farmers.

Most of the farm development loans have been made for a fifteen year period; chattel loans for three years and short-term loans for six months. It soon became apparent that short-term loans should be available for periods up to one year. Another restriction that became apparent, was that in cases where a farmer had not secured patent, already had a mortgage on his property, or where he may be operating under a long-term lease, he would be ineligible for a development loan, under the present bill. The Board has recommended that where other security is available, it can be used for collateral in place of a First Real Estate Mortgage.¹⁴

Farm groups recommended to the 1955 Legislature that another increment of \$300,000 be added to the loan fund. The Legislative Budget Committee included \$150,000 in its proposal for legislation and this figure was passed with no opposition. Indications are that the funds will be used to advantage by borrowers.

The Soil Conservation Service

Relatively little was known about soil qualities in the Matanuska Valley until after most of the land was in private hands. A reconnaissance survey in 1914 by Dr. Bennett needed supplementation.¹⁵ Detailed information was needed to help solve the wind-erosion problems arising on some farms and as a guide for future clearing and farm operations in the Valley. A survey party under W. A. Rockie spent the 1939 and 1940 field seasons in the area. This report finally was published in 1946 and provided the only detailed knowledge of soil conditions here for the next five years.¹⁶

Rockie was an employee of the Soil Conservation Service detailed for a special field job. An Alaskan office for SCS was established on February 15, 1948 with Mr. Charles W. Wilson as the first Territorial Soil Conservationist. His instructions were to make his staff and facilities available to the Alaska Soil Conservation District.

By 1953 the Alaska Soil Conservation District included 9 sub-districts and SCS technicians had assisted 8 of them with surveys of critical soil areas. Their aim generally is to map and describe soils prior to settlement or to clearing land for crops. They also will map individual

farms for best soil management and are available for consultation on erosion control and irrigation problems.

The SCS has made detailed surveys on 1,416,550 acres in Alaska. They have designated approximately 600,000 acres as being suitable for some form of cultivation.¹⁷

Two sub-districts, the Palmer and the Wasilla, are located in the Matanuska Valley. A soils technician from SCS is assigned to help farmers in each. In addition, most of the land area has been covered by detailed soils surveys. Interested farmers or prospective buyers can locate areas of good soils within a relatively small mapping error.

Survey crews have collected detailed soils information on over 362,000 acres besides redoing a part of Rockie's earlier work. Their reports show that about one-third of the area studied is suitable for some form of cropping (Land Classes II, III or IV).¹⁸ This work is being continued and expanded into the Susitna drainage in anticipation of future settlement pressures.

An important tie-in between land clearing practices and conservation is provided by having the soil technicians approve applications for A. C. S. payments. Payment is made only for clearing areas suitable for cultivation.

The Farmers Home Administration

The FHA, formerly the Farm Security Administration, first became involved in Valley agricultural loans through the Farm Security Administration loan to the Matanuska Valley Farmers Cooperating Association. The original loan of \$291,960 was made in 1940 to help the Co-op refinance itself with the ARRC. The remaining balance due is covered by a second mortgage. Payments from the Co-op are current.

Administration of this loan was handled from the regional office in Portland until 1942 when an Alaskan office was established to service Alaska borrowers. Mr. I. M. C. Anderson, who had served the University of Alaska in both the Extension Service and the Experiment Station was Area Supervisor until February 1, 1955 when he reached compulsory retirement age.

The first private loan through the Farm Security Administration to a Matanuska Valley resident was made on June 14, 1943 to Mr. Oscar Downing from south of Wasilla. Anderson reported that the FSA hesitated to make loans in the Valley because the ARRC wanted no

competition. Since the ARRC confined its activities to the four township area east of the Seward Meridian, the FSA began making loans outside these townships. Eventually, loans were made wherever the applicant could qualify. Loan activities have been slow because most applicants were unable to meet the requirements established by law or by agency regulations. A statement by USDA administrators in Alaska contains in cogent form the essence of Alaska's long-standing complaint against national farm loan policy:

...The FHA program was again discussed. Three points of law or basic policy appear to be working against this program in Alaska. They are housing standards and costs, percent of income derived from farms in early stage of development and schedule of repayment.¹⁹

The Matanuska Valley possibly has received a disproportionate share of available funds because more of its applicants could qualify for loans. Anderson's report for the fiscal year ending June 30, 1954 showed:

Loans made during the year:

5 initial operating loans	\$ 13,850
2 subsequent operating loans	4,300
1 farm-ownership loan	<u>13,000</u>
Total	\$ 31,150

Outstanding principal and interest balance:

53 operating loans	\$102,643
9 farm ownership loans	90,070
104 collection only operating loans	99,100 ²⁰
No housing loans	-----
1 cooperative loan (MVFCA)	<u>154,967</u>
Total	\$446,780 ²⁰

The Matanuska Valley Breeder's Association

This special interest association is one of the strongest farmer's groups in the Valley. It incorporated as the Matanuska Valley Dairymen's Association in March 1948 to cooperate with Wm. J. Sweetman of the Experiment Station in the artificial insemination and crossbreeding program. The name was changed in May 1953.

Original membership included 25 voting members, 11 associate members and 6 others using the insemination services without having membership. A total of 360 cows were bred during the first year. Membership grew steadily as dairy farms developed.

During 1954 the Association bred 700 cows for 59 members. Membership and service had doubled in less than 7 years. Few dairymen maintain their own herd bulls.

The Bureau of Animal Industry, USDA, loaned to Alaska young Holstein and Red Dane bulls representing some of the best bloodlines in the United States. These bulls provide the central stud for the Alaskan artificial insemination program. This two-fold approach involves upbreeding heifers by introduction of higher producing parent strains and introduction of hybrid vigor and higher production through crossing the major adapted breeds. That this program is successful was indicated earlier by the statistics on increased milk production.

The Valley Economy in 1955

Publicly supported government projects have proved that crops and livestock can be grown in the Valley. They are being continued to develop new varieties, new strains, new techniques and new methodologies for application to profitable farming. Newly oriented programs of adult education and of marketing techniques can create a major revolution within the economy. Private investment capital has been scarce and expensive. Government loans for farm development have been scarce until recently.

In spite of material shortages, the Valley economy has changed and progressed. It has passed into a new era. Some older residents no longer like the Valley. It is too grown up, too modern. Persons returning after absences of 20, 10 or even 5 years are lost among the changes. The mountain backdrop is the same--the winds still blow; cottonwoods, spruce and birch still cover large areas; but, the similarity soon ends. Change, irrevocable change, has affected every facet of local life.

Palmer is a good place to start looking at these changes. Only a railroad siding, a boxcar station and a few nearby homesteads dotted the landscape in 1935. Palmer in 1945 was an unincorporated community divided by the railroad right of way into "the Co-op Area" and "The Other Side of the Tracks". During the post-war period, Palmer experienced rapid and severe growing pains. It incorporated as a city in 1951. It bought and installed a water system. It bought a foundering telephone company. It improved its streets. It also acquired a city government, a police force, property taxes and a sales tax. Its population was estimated at 1,200 persons in late 1953.

By February 1955 Palmer has installed 236 water meters in private residences and another 33 in business places. A meter quite often serves more than one residence or more than one establishment in a building owned by the same person. Its 2 percent sales tax for 1954 totalled \$69,167 and represented \$3,458,400 taxable retail business within the city. Over \$3,693,000 of other business is generated within Palmer but these sales are tax exempt. In addition, many residents purchase goods in Anchorage or from mail order supply houses.

Palmer benefits substantially from government employment. Federal departments of the Interior, Agriculture, Army, Post Office and Justice as well as territorial offices are located here. Approximately \$500,000 in government salaries are paid to persons residing in Palmer. The Eklutna power project, virtually completed in late 1954, had poured additional monies through Palmer businesses.

Between 1948 and January 1955 construction in Palmer included the Matanuska Electric Building, the Experiment Station Laboratory and seven staff houses, the Valley Presbyterian Hospital, the Severns Building, the Neal Wright Building addition, the Hagen Building, a grammar school, a high school, the Pioneer Apartments, the Fire Station, the Palmer Library, 25 Alaska Housing Authority single family dwellings, two clubhouses, a grocery store, a garage, an auto accessory store and a concrete Fair Association building.

A survey of offices, retail, craft and service establishments in February 1955 showed the following list:

Professional

Dentist	1
Lawyer	1
M. D.	2
Optician (part-time)	1
Veterinarian	1

Cafes & Bars

Bars (open)	3
Bars (closed)	1
Cafes	5
Clubs & bars	2

Hotels

Hotels	4
Apartment hotels	1
" (incomplete)	1
Trailer court	1

Retail Stores

Curio shop	1
Dept. store	2
Dress shops	2
Dry goods	1
Flower shop	1
Grocery	3
Hardware	2
Liquor stores	3
Lumber yard	1
Theatre	1
Variety store	1

Fuel

Bulk oil	2
Garage only	2
Garage & gas	6
Gas stations	2

Food Services

Egg grading plant	1
Milk plant	1
Potato storage	1
Slaughterhouse (part-time)	1
Wholesale grocer	1

Crafts

Baker	2
Barber	2
Barber shop (vacant)	1
Beautician	2
Drugs	2
Dry cleaner	2
Electrician	1
Jeweler	1
Laundry	1
Plumbers	2
Printer	1
Sheet metal	1
Shoe repair	1

Government Offices

A. C. S.	1
A. R. R.	1
Agricultural	4
Interior	3
Justice	1
Post Office	1
Terr. Police	1

Services

Bank (& ARRC)	2
Bookkeeping	1
Construction	1
Dozer operators	3
Guide (part-time)	1
Flying services	3
Heavy duty repair	1
Insurance company	2
Taxi	2
Truckers	2
Real Estate	1
Travel agency	1
Storage warehouse	1
Used furniture	1

Churches

	7
--	---

Public Service

City offices	3
Electric Coop	1
Fire station	1
Hospital	1
Public library	1
Schools	3
School bus owner	1
Telephone Coop	1

At least a dozen other firms were located within two miles of the city limits. Many other small businesses are scattered throughout the Valley. Wasilla has its own trade center including a general store, a hotel and café, a garage, bars, U.S. Commissioner, Post Office, Community Hall, library, etc. An addition was constructed to the school in 1954. Knik and Matanuska have no retail businesses left.

Three schools were being operated in the Valley during 1955. These include the Palmer Independent School district with three buildings and 790 pupils; the Wasilla Territorial school with 130 pupils; and the Richards Children's Home with approximately 15 students.

The Evan. Jones mine, the Buffalo mine and one or two other small private coal mine holdings were being operated at reduced levels in 1954. Activity varies with the availability of contracts from the military forces and from Anchorage business firms. Employment varied from nearly 300 men in 1953 to about 150 in February 1955. Peak payroll from the coal mines was about \$1,750,000 and annual sales about \$3,250,000. Costs of mining remain high and competition from imported fuel oil for heating purposes is extreme. Strip mining, using equipment rather than miners, is being tried in at least two areas.

Four gold mines of proven value are idle because low pegged prices of gold and high labor costs make their operation unprofitable.

No census of population for the area is available. It is known that many G. I. homesteaders located in the three townships west of the Seward Meridian between 1948 and 1951. Some still reside on their land, some have moved nearer seats of activity, some have left the Valley. Homesteading activity spread northward in 1953 and 1954 to include the Little Susitna area and westward past Pittman to Big Lake. Construction of new highway links on the western edge of the Valley facilitated settlement. Many small homes have been constructed along the main highways. Summer homes dot the shores of Big (Fish) Lake.

In chapter VI we quoted the figure of 172 families in the Valley during 1923. Examination of an occupancy map for the seven townships in the heart of the Valley in 1955 showed 420 families on tracts of over five acres. At least another 800 families live on tracts of less than five acres, on city lots, in apartments or in hotels. The proportion of single adults to married persons has dropped sharply in recent years following completion of large construction jobs. Valley population statistics undoubtedly would show a much higher proportion of young adults and of small children than is normal in a mature society. It is commonly estimated that there were about 6,500 persons in the Valley in 1954.

Several other indicators of business activity and of community growth were examined to show present status of Valley affairs. These include the bank, the electric company, the telephone company, the farmer's cooperative, the ARRC and an analysis of present status of colonists.

The Matanuska Valley Bank

A small bank financed by local capital was organized at Palmer in 1946. It opened for business in July 1947 with capital assets of \$15,000. It recapitalized in 1948 for \$30,000. It was reorganized in 1952 with capital assets of \$50,000 and a surplus of \$75,000. In June 1954 its application for FDIC was accepted and depositor's funds are now insured under federal regulations.

This bank has grown with the community and has helped the community grow. Its annual growth in importance is reflected in deposits and loans:

<u>Year</u>	<u>Deposits</u>	<u>Loans</u>
1947	\$ 196,000	\$ 61,000
1948	490,000	204,000
1949	750,000	405,000
1950	809,000	444,000
1951	974,000	460,000
1952	1,360,000	810,000
1953	1,523,000	905,000
1954	1,788,000	798,000

Approximately 60 percent of its loan portfolio is devoted to agricultural purposes. Banking requirements limit bank investments to relatively short term commitments. Periods will vary with individual cases, but chattel loans generally must not be for over 18 months and real estate loans for not over three years. Seed and fertilizer, farm equipment, livestock and improvement loans all flow throughout the community from the Matanuska Valley Bank.

Matanuska Valley Federal Credit Union

Another measure of permanency and stability of any community lies in the willingness of residents to invest savings. Most people in the Valley have very modest incomes. The credit union was organized in 1949 to promote thrift through installment saving and to make useful loans to members at reasonable charges.

No intensive drive for membership or for participation has been conducted. Growth has resulted largely from momentum naturally generated by confidence in the future. The credit union paid four percent interest on savings for 1954. It never has lost a loan and has no loans delinquent. Its progress is indicated by statistics from the financial statement, December 31, 1954:

<u>Year</u>	<u>Members</u>	<u>Amount loaned</u>
1949	41	\$ 1,700
1950	62	8,767
1951	86	13,225
1952	106	17,950
1953	132	19,992
1954	162	27,940

The Matanuska Electric Association

Electrical power is supplied to the Valley through the MEA, a local cooperative, organized under the Rural Electrification Administration. It was incorporated in 1940 with approved capitalization of \$137,000. Its first lines were activated in 1942, with 150 customers on 93 miles of line. Of the 150 customers, 31 were home consumers and 35 were farms. A minimum monthly charge of \$3.50 was made for current. W. C. Mau was the first manager.

All early records and maps were destroyed by fire in 1947. It is known that growth had been continuous and rapid. The ARRC general manager's report for 1946-47 mentions that MEA had grown to 102.5 miles of line and 412 patrons by that date.

By January 1, 1955 the Association had extended its services to Big Lake and Knik on the west, to Jonesville on the north and to Chugiak on the south. It operated 330 miles of line for 1,422 patrons. The average monthly bill for homes was 285 KWH for \$15.67 and on farms was 572 KWH for \$25.30.

Service was further strengthened by construction of an office-service building in 1954 for \$129,434.57 and by tying into the Eklutna Power Project on January 6, 1955 with firm power promised for February 12, 1955.

Unit power rates by Stateside standards are extremely high, but they are reasonable under present Alaskan conditions. They range from a flat fee of \$3.50 for patrons using 35 KWH or less per month to 3 cents per KWH for 200 and over.

The Matanuska Telephone Association

Telephone service in the Valley was first provided by a privately-owned, under-financed family business following World War II. It was limited to the Palmer community and to a few surrounding farms. Its service was intermittent, poor and expensive. Storms and moose tore up the wires. Interruptions in service were common.

Assets of the Matanuska Telephone Company were acquired by the City of Palmer in 1952 for \$7,500. Service was limited to Palmer residents and a few phones already installed in the nearby rural area. It also was unsatisfactory because of poor equipment, undercapitalization and limited area coverage.

Congressional action in 1952 made possible use of government funds for rural telephones through the REA. Valley residents immediately began negotiations for a telephone loan. It was first thought that MEA could include telephone operations. Then the City of Palmer examined possibilities of expanding its service beyond city limits. Finally, in 1953, it was determined that a separate new association would be necessary.

The MTA was organized informally in early 1954 and a membership drive was begun. Application for a loan was accepted by the REA in August 1954. A minimum of 516 members was established as a goal. Before the sign-up drive was over, 650 members had paid their initial membership fee of \$10 and had purchased equity stock for an additional \$40 apiece. The Association must have 710 members within 10 years.

Telephone service to farms and rural homes probably will become a reality for Valley residents by late 1955.

The Matanuska Valley Farmer's Cooperating Association

The Co-op, as it is commonly called, is the largest single agricultural enterprise in the Valley. It was first organized by the ARRC in 1936 as the Matanuska Valley Farmers Cooperative Association. Amended articles were filed in 1937 to alter the name to include the distinctive "cooperating" in its title.

Early contracts between the colonists and the ARRC contained a provision whereby membership in the Matanuska Valley Farmers Cooperating Association was obligatory. Purchase of production and consumption goods and sale of farm products were to be made through this "cooperating" organization only. Several settlers objected to this form of regimentation. The tumultuous times that followed have brought many changes to the Co-op organization and probably were a major reason why several other desirable changes have not been adopted. Scars from early conflicts among members and between members and management still are evident.

C. W. Peters, in his 1946 analysis wrote in part:

Between 1937 and 1939 there developed among colonists considerable dissatisfaction with the manner in which the association setup was being managed. Apparently some difficulty was experienced in marketing at a satisfactory price certain of the produce delivered by the members. The tendency was to lay the blame for this situation at the door of the ARRC regardless of the actual cause in any given instance. About this same time there was a movement afoot among members of a certain element in the colony to force further concessions from the ARRC. This group was organized under the name of "Ice Worms" and two of their avowed purposes were to prevent eviction of colonists for contract violations and to induce the ARRC to turn over to the MVFCA all of the operating units at Palmer. In order to be more articulate in presenting their demands these people retained an attorney to spearhead the drive on these and other issues.

Considerable support for the taking over of the community business facilities in Palmer by the association was developed by 1939 and during that year an agreement was reached with the ARRC whereby the cooperative would be permitted to assume control. Actual transfer of the facilities was consummated during the winter of 1939-40. In the meantime

the Board of Directors of the MVFCA had employed L. C. Stock of Kelso, Washington to be its first manager. In order to finance the operations of the association an application for a 30-year loan of \$300,000.00 was filed with the Farm Security Administration. This loan was approved and advances totaling \$291,960.00 were made on the commitment. In approving this loan the FSA required a first mortgage on the facilities. This security requirement was met through the deeding by the ARRC of the entire operating unit properties, except the school, to the cooperative. In consideration of this action by the ARRC it was first agreed that the MVFCA would pay to the ARRC at some late date 50% of the appraised valuation of the properties acquired. The appraisal showed a gross value of \$560,654.15. On the 50% basis the price was to have been \$280,327.07, of which \$195,298.78 represented realty and \$85,028.29 equipment. All through the negotiations with the ARRC the Ice Worms group had contended that the properties should be turned over to the association free of charges, including even the inventories of merchandise for which some \$116,000.00 was paid to the Corporation from the proceeds of the FSA loan. Following much discussion of the purchase price over a period of months the ARRC finally took a non-interest bearing note for \$200,000 due in 1971, secured by a second mortgage, as its consideration in the deal. In 1944 the corporation offered to accept \$100,000 in full settlement of this obligation, but the Association was not then in a position to go through with the transaction.²¹

Early developed frictions were kindled again and again as first one element and then another gained momentary control. Much of the trouble, exclusive of the Iceworms, stemmed from the very complexities of the organization. Functions such as maintenance of lodgings for transients or providing community recreation facilities have little relation to marketing farm produce and purchasing farm supplies. The situation was further confused by the allocation of overhead charges and patronage dividends among departments such as the general store (Trading Post), the farm supply store (Warehouse), the garage, the power plant, the produce department (potatoes, other vegetables and eggs) the creamery, the slaughterhouse and meat department and the Anchorage milk retail outlet (The Anchorage Dairy).

Managing a de facto organization of such complexity, further hampered by sharply drawn factions among the membership and on the Board of Directors, has been a harrowing experience. No manager to date has been equal to the task. Peters summarized the situation prior to 1946:

There is evidence that some of the confusion among the members may be the result of rapidly changing policy or of failure on the part of the Board to establish a definite policy. Without question there have been too many instances of the Board stepping over into the field of management and of management usurping the Board's function of policy determination...

A major reorganization of departmental functions occurred in 1952. Policy and management phases were sharply delineated. Certain low-profit services were curtailed or sharply reduced. A bold program of expansion in the dairy plant was initiated. Grumbling by individuals and groups still continues, but the Co-op seems to be on firmer financial ground than ever before. It has withstood major bolts by groups of vegetable growers and dairymen. It has retrenched and drawn ahead against increasing competition.

Growth of the Co-op since 1940 is documented by volume of gross sales for selected years:

1940	\$ 481,057	1948	\$1,550,000
1941	637,005	1949	2,143,617
1942	709,433	1950	1,041,000*
1943	1,085,344	1951	2,302,894
1944	1,303,344	1952	3,035,082
1945	1,091,439	1953	3,474,876
1946	1,060,084	1954	4,135,477
1947	1,301,274		

* Change in fiscal year. Sales for first six months of year only are reported.

The Alaska Rural Rehabilitation Corporation

Most people think of the ARRC in relation with the Matanuska Colony. Actually, its charter allows it to accept public funds for agricultural loans from any source and to make loans anywhere in Alaska. In practice, its Board of Directors has favored loans within the Matanuska Valley for further development of agriculture.

Its present source of funds comes from interest and payments of principal from the Colony loans and subsequent activities. Its assets amounted to \$861,441.50 on June 30, 1954 according to the latest auditor's report. At that time the Corporation had \$739,000 on loan to 400 individuals. These funds were distributed: \$363,000 on real estate mortgages, \$237,000 on real estate contracts, \$38,000 on chattel mortgages, \$75,000 unsecured and "other" \$26,000. Nearly 90 percent of all its funds were on loan within the Matanuska Valley.

James J. Hurley, current manager, announced in early spring of 1955 that he was authorized to make available \$50,000 for land clearing loans. All of this was loaned to Valley borrowers by May, 1955.

Transportation

The Matanuska Valley²² in 1955 contained 342.7 miles of road. The Glenn Highway portion of 41 miles is paved with bituminous. The Palmer-Wasilla road was paved for 4.6 miles during 1954 and the remaining 6.4 miles will be completed in 1955. About 40 miles of mountain road are maintained only in the summer.

The airport at Palmer will accommodate DC-3 planes easily and DC-4's land here occasionally. Wasilla and Willow have small landing fields and a military emergency field is located at Goose Bay. Float and ski-equipped planes operate on the many small lakes of the region.

Highway traffic through and within the Valley has increased rapidly during the period 1952-54. Road counts conducted by the Alaska Road Commission show the following distribution for one-week periods:

<u>Location</u>	<u>Dates and month</u>	<u>Number of vehicles</u>		
		<u>1952</u>	<u>1953</u>	<u>1954</u>
Knik River bridge	August 15-22	2,668		
	August 7-14		6,970	
	June 24-July 2			11,558
Wasilla Road	August 15-22	1,632		
	August 7-14		3,187	
	June 24-July 2			3,860
Mi. 59, Glenn Highway	August 15-22	1,467		
	August 15-22		4,398	
	June 24-July 2			4,032

Since the data are not for the same weeks during the summer, direct comparisons may be somewhat misleading. However, no holiday traffic is included and the periods are representative of the summer season. Long-distance travel over the Glenn Highway for June 1954 was lighter than for the previous August. Probably this was a seasonal condition rather than a decline in traffic.

Traffic over the Knik River Bridge and on the Wasilla Road reflects the increasing importance of the Anchorage metropolitan area to the Valley. Many families drive to the Valley for the day. Others visit resorts or have cabins on lakes in the area. Good roads are necessary if heavy weekend traffic is to be handled efficiently, safely and conveniently.

Colonist experience to 1955

A student of planned settlements would have difficulty locating boundaries of original colony tracts in 1955. Most of the original houses and barns still stand although many of them have been drastically modified. Originally, 208 tracts were numbered. Seven of these never were occupied. Of the 201 occupied tracts, only 47 are unchanged in size.²³ The 40 acre tracts generally are utilized as rural residences or as residences and part-time farms for production of potatoes, vegetables or poultry. The 201 tracts have been absorbed into units as follows:

<u>Acreage</u>	<u>Number</u>	<u>Acreage</u>	<u>Number</u>
40	29	200	7
60	1	240	1
80	36	230	1
120	37	400	1
160	19		

Colony tracts would have averaged 51 acres if all had gone according to original plan. Within less than 20 years, settlers had upset this program and had extended the average holding to 105 acres. Still further combinations would have occurred had contiguous lands been available. The landholding pattern established by the Matanuska Colony has been a major hindrance to development of economic-size units.

This problem was recognized by the Managers before 1940. They began combining tracts wherever it was possible. Tracts relinquished by

colonists or repossessed by the Corporation were redistributed to enlarge adjoining farms. But almost irreparable damage had been done in areas of better soils. Smallest tracts were laid out in these areas under the assumption that they would be adequate to support a family at a subsistence level. Unfortunately for the plan, many families were not satisfied to live that way. Some sold their cropland to adjoining dairymen, took off-farm employment and used their buildings as rural residences. Others purchased additional tracts, from the Corporation or from owners who had received warranty deeds after payment of their indebtedness, as the basis for commercial farms. The process continues, and will continue, until a realistic ownership pattern compatible with modern economic conditions is evolved. Many years and perhaps several generations will pass before desirable adjustments are completed. In this respect the Matanuska Valley compares with older, established communities in the States where the small farm is giving way slowly to mechanized modern farming.

Analysis of the methods and the chronology followed in making tract combinations is well nigh impossible. Transfers often are not recorded with the U. S. Commissioners. Several tracts have changed hands as much as a dozen times since the original drawings in 1935.

Part of this instability is traceable to the colony's early history. Tracts on the margins of settlement were relatively isolated and were improved slowly. Some obviously contained large proportions of poor soils or were heavily timbered. Settlers early realized that farm development would be slow and expensive.

Analysis of the 1955 situation on Colony tracts shows that the original 201 units have shrunk to 132. Almost every conceivable kind of size combination is represented on the next page.

Thirty-four original or replacement Colonist families still were on tracts they had acquired between the original drawing in 1935 and 1940 when the formal replacement program was dropped. Twenty-three of these located in 1935, three in 1936, three in 1937, two in 1938 and three in 1939. Several are among the better-situated full-time farmers today. All of them depending upon agriculture for their livelihood have increased their original holdings.

The Soil Conservation Service has mapped all areas including colony tracts. Their data shows that the original 208 tracts contained 79 percent classes II or III land, 8 percent class IV and 13 percent classes VI, VII or VIII. Averages based on tracts held by the 34 settlers who have stayed on their land 15 to 20 years are almost identical with

<u>Colony tracts only</u>	<u>Number of operating units</u>	<u>Number of colony tracts represented</u>
40 acres as original	29	29
40 combined with second colony 40	13	26
40 combined with two colony 40's	12	36
40 combined with three colony 40's	1	4
40 combined with part of colony 40 (20)	1	1.5
80 acres as original	18	18
80 combined with colony 40	12	24
80 combined with colony 80	4	8
80 combined with colony 80 & 40	1	3
	91	149.5
<u>Colony tracts and others</u>		
Colony 40 and non-colony 40	5	5
Colony 40 and non-colony 80	2	2
Colony 40 and non-colony 120	2	2
Colony 40 and non-colony 160 or more	6	6
Colony 40, colony 40 and non-colony 40	5	10
Colony 40, colony 40 and non-colony 80	6	12
Part of colony 40 and non-colony 80	1	0.5
Colony 80 and non-colony 40	5	5
Colony 80 and non-colony 80	6	6
Colony 80 and non-colony 160	1	1
Colony 80 and non-colony 200	1	1
Colony 80 and non-colony 320	1	1
	41	51.5
Abandoned and undeveloped	--	7
Total units in 1955	132	208

averages for all tracts. Consequently, little basis exists for believing that soil quality was a factor forcing settlers from their tracts.

Classifying farms by major enterprise also provides no basic condition that would make one family become a rural resident or another become a full-time dairy farmer. Among the 12 rural residents, for example, 79 percent of their land was in classes II or III. Six had small amounts of waste land. Six did not. Four owned only class II land—the best in Alaska. Some are located on the edge of Palmer, some are on the far edge of the Colonization area. Only the three families classified as "subsistence" have a relatively high percentage of untillable land. In each of these cases, conditions other than soils determined the enterprise. Soils and distance from the Community Center were not factors determining the use made of the holdings.

Half of the 34 families are part-time farmers or rural residents because they never were farmers. They were mechanics, tradesmen or craftsmen who returned to their preferred occupations as soon as they could. Perhaps they were more tenacious, or were less individualistic, than other families who left the Matanuska Colony. That cannot be proven. The fact remains: they stayed and they are self-supporting today.

The full-time dairymen and potato-dairymen apparently intended to make a career of farming. They bought more land, remodeled their barns, cleared additional fields and bought necessary modern machinery. They might have succeeded as well back in the states of their origin during the past 20 years. The Matanuska Colony provided an opportunity for them to get a start. Growth of the Anchorage-military market provided a chance for them to keep going.

These 34 families have held their land and have adjusted their operations according to their wishes. Other families had illness or other problems making it logical for them to move—regardless of conditions within the Colony or within the Matanuska Valley. Increasing age, failing health and death are rapidly taking their toll of families still connected with the settlement program of the Matanuska Colony.

Analysis of an old list containing names of 185 Colonist families provides an interesting sidelight.²⁴ After nearly 20 years, 49 couples still are living in the Valley although not all still live on Colony land. Others were accounted for in March 1955 as follows:

Couple still in the Valley	49
Couple left Alaska	77
Couple left Valley, still in Alaska	27
Couple separated, one still in Alaska	6
Couple separated, both still in Alaska	4
Couple separated, both left Alaska	1
Male deceased, female in Alaska	10
Male deceased, female left Alaska	7
Female deceased, male in Alaska	2
Both deceased	2

185

A list of original Colonists still in Alaska was prepared for the Colony Day Celebration in 1953. It contains 130 names of men and women to allow for couples broken by death, divorce or separation. Occupations listed were:

47 housewife	3 office worker
25 farmer	3 heavy equipment operator
11 laborer	2 miner
10 carpenter	2 domestic
5 retail clerk	13 miscellaneous*
4 store manager	5 occupation unknown

* one each of blacksmith, cafe operator, contractor, post-master, bus driver, bricklayer, trapper, trucker, saw-mill operator, plumber, telephone operator, bartender and retired.

Recent homesteading experience

Many homesteaders who settled on tracts made available to veterans of World War II picked poor land. Many realized early that they never could hope to develop prosperous farms. Others tired of frontier life and left after a year or so of residence.

A check of 110 such homestead entries made between 1945 and 1950²⁵ shows that 11 are full-time farmers, 20 are part-time farmers combining farming with off-farm employment, 22 depend on businesses other than farming and the remaining 57 are unknown or were reported to have left the Valley. Study of the conditions surrounding their settlement brings out several distinct situations.

Most of the families who left their homesteads were located on poor land and on the outer edge of settlement. Most of the full-time farmers are located on tracts containing large proportions of tillable land and also are within developing areas. Several part-time farmers are working for high wages which are being used to support their families and develop farm capital in buildings, machinery, land clearing and livestock. Many of the homesteaders who left almost immediately were single men.

The factor of speculative land values, although hard to evaluate, must be considered in recent alienations of public lands. Activities of the Anchorage Chamber of Commerce and others relative to a causeway across Knik Arm, the Susitna birch stand, Susitna power sites and similar potential developments have been responsible for land claims under homesteading laws although the claimants have no apparent intentions of farming. Recent changes in the law making cultivation of land again a requirement of homesteading will largely remove this subterfuge as an instrument for gaining title to land. Activity by oil and gas companies in the Cook Inlet area has encouraged many persons to tie up surface rights in anticipation of windfall profits.

Chapter X - Handwriting On The Wall

No history of a community can be completed. Change is inevitable. New historical facts develop while ink dries on the last written paragraph. So it is with the Matanuska Valley. A dynamic people call it home. For many it has become a more than satisfactory residence. Many families, however, have learned about hard times here. They have had problems equal to those experienced by rugged frontiersmen anywhere. The community meets and overcomes its problems as it forges ahead.

Many new arrivals, "cheechakos", have seen only the bustle and the haste, the high wages and the activity, accompanying prosperity. The casual visitor reaches the Valley over a bituminous highway. He sees many late model autos on the streets of Palmer and Wasilla, new and modern buildings, and activity everywhere.

But, if he looks closely and listens carefully, he will find undertones. The Valley is entering another period of transition. Employment for local men on federal highway construction, airfields, public housing projects, the Eklutna power project and at nearby military bases is nearly over. Continuing government construction is further afield and not all family men can follow the work. Private investors in homes and businesses hesitate to pay "boom" period wages for labor often mediocre and high prices for construction materials often of poor quality. They don't know what to expect of the future. They will make do for a year or so until the situation is clarified. Coal miners are partially unemployed. Unemployment compensation for seasonal workers is high. Collections on extended credit are poor. Volume sales are off.

To many people, the future looks gloomy in many respects. It need not be. Despite the temporary recession in certain types of employment, other fields are holding firm or preparing to expand. Civilian population continues to grow. Wages and salaries for government employment, schools and other public services remain steady. Farm productivity from the Valley is increasing. The market for local farm products still is far from satiated. It should steady and strengthen in future years. Coal resources are being used. A market is available if expenses can be kept competitively low.

The entire Upper Cook Inlet area has acquired a philosophy of permanency and substantial progress. "Fly by night" and "get rich quick" ventures have less place here than ever before in Alaska's history. Perhaps, this is the most significant development of the last decade. The modern frontiersman is determined to stay. He is adaptable. He often has alternative means for getting along.

Trade in the area will continue to be bolstered largely by military and military-generated populations. With the military to act as a permanent catalytic agent, priming the economic pump, the civilian economy will escape some hazards that have harmed the Valley before.

Temporary set-backs in area development are to be expected. The upward trend of progress always is marked by temporary downward dips. Alaska may not now be ripe for the industrial revolution occurring in the Pacific Northwest—but it certainly has been impregnated with ideas of a prosperous future. Young people and a young country make a combination hard to beat.

This detailed history of the Valley was undertaken under the thesis that Alaska will progress, that populations and markets will continue to expand and that new areas will be opened for agriculture as farm products are needed. The Matanuska Valley has had a long history of ups and downs. It is the most active farming area in Alaska today. What guidance can be gathered from its experience? What principles have been demonstrated here that can be applied to other new areas in Alaska? These are discussed under four main headings:

1. Paternalism and progress
2. Markets and marketing
3. Community facilities
4. People

Paternalism and Progress

The Federal government, being far away and imperfectly represented, is a popular whipping-boy and bugaboo for many problems current in Alaska. Its understanding of Alaska has been suspect many times and in many ways. Not a single Alaskan resident, however, would grant government power to solve all the local problems.

Progress by government direction, or by government permission, occurs only as government understands conditions and acts in positive ways to meet them. Rule by inexperienced, absentee, disinterested parties is most difficult for all concerned. Alaska has been overruled in some matters and underruled in others.

The Federal government never has had a single unified policy toward Alaska. Laws, regulations, rules and judgements have vacillated very often with the ability of legislators interested in single phases of the overall problem. Bureau chiefs of government departments have played on these interests with varying results.

Matanuska Valley residents are looking ahead.



The modern creamery of the Matanuska Valley Farmer's Cooperating Association is a popular stop on tourist tours.

A horticulture farm tour is recorded by a television crew from Seattle at the Matanuska Experiment Station, July 24, 1953





High producing cows and sound farm management pay off in a satisfactory level of living and a good life for farmers in the Matanuska Valley, as they do almost anywhere else.

Economic ups and downs of settlers in the Matanuska Valley can be oriented with public policy toward Alaska. Homesteading in the early days involved a long and arduous unraveling of regulations only remotely related to local conditions. Early homesteaders may have been trying to settle the land before the region was "economically ripe" but little public effort was made to hasten or to assist the ripening process.

Commercial agriculture in Alaska must follow the development of other industry or business which creates a market. The gold resource of the Valley was of insufficient value to provide a permanent market. Coal mining and allied industries might have prospered had they been allowed to develop. Coal might have provided ballast and revenue for southbound freighters in the Alaska trade. It might have assisted in providing lower freight rates on other commodities and have thereby encouraged local businesses. However, the coal deposits were placed in a government reserve as soon as they showed signs of having value. The first froth of private interest and initiative was lost. It never has been recovered. Instead, oil from California is shipped to within a few yards of under-developed local coal deposits. Alaskan coal faces severe competition in the years ahead.

Other resources of the Valley have been handled in the same haphazard manner. Settlement was largely completed before a census of soils was made. The road program was delayed until many settlers had located their buildings and often until expensive trails had been bulldozed through the wilderness by use of private funds. World War II veterans were encouraged by the amended Homestead Law to settle available lands. No safeguards or guides concerning soil types were established until hundreds of families had utilized their homesteading privileges and had spent their savings on tracts practically worthless for agriculture.

Paternalism as represented by laws and policies leading people into ventures is wasteful of human and other resources unless it is implemented by a complete program. Making land areas available for private ownership usually is only one link in a chain of the development program. The soil resource must be suitable for agriculture, transportation lines must be established and maintained, markets must be at hand and funds for farm development must be available in adequate quantities at interest rates settlers can afford. These all must be integrated into any agricultural community development program. This has not been the case in the Matanuska Valley—or anywhere else in Alaska.

It has long been recognized in Alaska that a program of farm financing based on low interest-long term loans is essential to orderly development of local agriculture. Private monies, as represented by banks and

insurance companies, are limited to short-term loans. Such limited federal loan programs as have been extended to Alaska are inapplicable to the situation and insufficient to the need. The Alaska legislature appropriated \$200,000 in 1953 and another \$150,000 in 1955 to a revolving farm loan fund administered through the Territorial Commissioner of Agriculture. These are being further supplemented by \$50,000 set aside by the manager of the ARRC to be used for land clearing and development loans. It is assumed that payments for land clearing under the Agricultural Conservation Service will continue.

These monies, together with small amounts available from the Farmer's Home Administration, the ARRC and private banks, will serve to help stem the mounting deficit in local farm products. Few settlers will be able to borrow all the funds they could use for farm development, but the current market still is relatively small. A start in the right direction has been made and time will allow for some trial and error in farm development.

Only recently has agricultural technology and a modern scientific approach been applied to farm problems. Experience applicable to currently settled areas is being developed at a rapid pace. This growing abundance is too late for many past settlers in the Valley. It is only partially applicable to presently unsettled areas. Observation of research experience should precede large-scale movement of farmers to untried regions.

Currently the great agricultural need in Alaska is to consolidate its present position. Sufficient tillable land has been mapped within reach of presently available markets. Much of it is in public domain. Agencies responsible for connecting transportation links, for land surveys, for land transfer, for aid in financing and for technical assistance should map plans to meet a common goal. This goal should be to get good land into production under private ownership. Government should help settlers help themselves—help them with technical know how, with guidance toward areas where success is possible, with judiciously administered development and operating loans, with a boost and a pat on the back for those settlers who demonstrate their willingness and ability to move ahead toward self-sufficiency. Government has no function in doing all the thinking and risktaking for settlers. It helps no one when it provides facilities that encourage extremes of isolated settlement which further add to public costs and to costs of operation to the individual. People who insist on isolation should move in with the complete understanding of what services and assistance they can expect and what they cannot expect. This same principle applies to business and industry. They are needed to insure an expanding market for an expanding agriculture.

The same procedure should be followed when new markets develop elsewhere in Alaska. Costs of government will be minimized if new areas are opened to settlement in units or blocks where community facilities will serve the largest possible number of persons. Public facilities should be extended to new blocks only as the good resources of the earlier blocks are taken up and used.

Markets and marketing

Recorded history of the Matanuska Valley plainly shows that markets and agricultural production must be in balance. Markets must be available. Early settlers made little progress because they had a very limited market at trading posts and at a few boarding houses.

Early railroad construction encouraged settlement in anticipation of larger markets along the Railbelt. Completion of construction through the Valley, followed closely by World War I, temporarily ended those hopes. This change brought financial ruin to several enterprising settlers.

The potential market increased little during the next twenty years—and agriculture expanded little. A tenuous balance existed between growers selling vegetables according to acceptable standards and the retailers who would feature local products.

The Matanuska Colony was superimposed over this balanced situation. Although practically no surpluses developed in the Colony until 1938, settlers were worried about potential farm markets. Several families left because the future seemed to be very black. Others left the Colony to take jobs in construction as soon as jobs became available. At one time in the early 1940's nearly 40 Colonist farms were vacant. Other places were used only as rural residences.

Defense preparations in the Anchorage area provided a new market for large volumes of food. Farmers again expanded production and began to develop a community based on commercial operations. Markets for milk, eggs, meat, potatoes and vegetables expanded rapidly. As recently as 1950, relatively little attention was paid by most farmers to proper grading. Competitive pricing has been brought home to them even more recently. The inevitable result was that the Valley suffered "surpluses" during a period when it was meeting few needs of the local market.

These conditions, together with demands by the military that all purchases meet grade standards, have brought general realization that local produce

must be of uniform high quality. Better grading, for example, has measurably increased consumer acceptance of local potatoes. Local head lettuce, cabbage, carrots, radishes and other crops have moved much more readily as the general quality improved.

Seasonal supply is another serious problem. Most vegetables can be stored for relatively short periods. Feast or famine must be overcome through use of adapted varieties and through improved storage facilities. These lessons are being learned slowly and adjustments are occurring.

Plans for settlement of any new area must weigh carefully the total market potential available, the strength of competition from established producing areas within Alaska and the competition from outside Alaska.

Community facilities

Some homesteaders on the margins of settlement in the Valley still pack supplies in and products out. They don't like it and will not develop paying farms until they have roads. Some families move into town for the winter so children can attend schools.

Isolation and lack of community facilities--inability to move around and to depend on neighbors for mutual assistance--are major problems to the first new settlers in any area. History records that at least one generation commonly struggles against these odds. They sacrifice their financial well-being to build a future for posterity.

Modern theory, as represented by resettlement and reclamation projects, seems to lean toward government planning and subsidization of new communities. The Matanuska Colony often is used as an argument for this type of program. Much ado is made that the Matanuska Valley, as a result of the colonization program, is the only prosperous agricultural area in Alaska.

Such reasoning fails to weigh adequately that the Colony was superimposed on a budding transportation system, on farms that had been established without subsidy and on an almost non-existent market.

A more realistic analysis points out that the Colony and its \$5 1/2 million investment speeded up developments. The colonization program was saved by the unprecedented and unheralded establishment of nearby military bases and the attendant growth of local markets. The Colony may have been located by design; it was saved by luck. Its facilities sprang full-blown upon a community struggling at a hoe culture level. Subsequent urban development demonstrates that the facilities would have been

grouped and located differently had time been allowed for study of foreseeable problems.

In the light of this study, serious and unbiased thought should be devoted to "encouraged area settlement" through judicious development of a highway system, by a liberal and realistic land policy and by practical long-term publicly financed capital loans. The potentialities of families already in Alaska and demonstrating their fitness for possible supplementary assistance should be studied carefully before decision is made to import strangers to settle new areas. Government should be behind the entrepreneur helping him—not over him forcing him into a preconceived mold. It is very doubtful that any individual or any group is capable to plan finite details for a community. Broad definitions of physical conditions, integrated programs of public works related to speed of community needs and a policy of encouraging development through educational, financial or other necessary assistance should be the function of government. Details on individual farms belong to the individual family. This was not done in the Matanuska Valley Colony.

People

The North American continent has been a human melting pot for 200 years. Literature of the frontier has stressed unceasingly that frontiersmen were "different". They were misfits from older established communities; restless, courageous, independent in thought and action.

The rainbow's end assumes many forms; promises of wealth, adventure, freedom, excitement or change. Alaska now is the remaining space frontier. It is the safety valve for an urbanized Continental waistline.

The frontier always has tested and discarded people in the settlement process. It has been estimated that about 20 percent of original settlers in the Plains States remained to build the country. World War I largely depopulated the Matanuska Valley of active, vigorous, young men. The 1920's and early 1930's offered little incentive for anyone to come and stay here.

About 50 percent of colonists still were in Alaska after 20 years.¹ One-fourth still are in the Valley. Less than an eighth are farmers. The Alaskan frontier has done no better and no worse than other American frontiers. Notable failures can be offset by families of children and grandchildren raised here. They have stayed and prospered.

All the frontier experience from the States and all the improvements in technology and concepts of planning could not outweigh the cold fact: that in new frontiers new sets of conditions develop. There is little place for preconceived notions. Adjustments must occur. The Matanuska Colony was no glowing success, neither was it a glaring failure.

Little evidence exists to show that formal selection of settlers for new areas is more effective than natural selection. It is theoretically possible to establish standards which would provide a high ratio of success. It is possible to weed out the physically unfit, the aged and those having other limitations. However, no infallible measure exists which will set precise limits of physical unfitness or the infirmities of age. A partially incapacitated man with spirit may well fit into a frontier situation better than a healthy weakling. An aging adventurer may do better than a younger man lacking initiative.

The Agricultural Experiment Station and the Bureau of Land Management have separately and jointly noted the high mortality of veterans homesteading after World War II. The mortality was higher over a shorter period than for the Matanuska Colonists. Yet, conditions also were significantly different. Because they settled on shallow, gravelly tracts on the margins of the Matanuska Valley, they never had a chance to develop paying farms. Even those with immature ideas of speculative land values found that values failed to rise as anticipated. Most of them moved away as soon as they had used up their savings or their rights to subsidy under the On-the-Farm Training program.

On the other hand, veterans who settled on better lands within the present confines of the agricultural community have a high incidence of success. These families may possibly have utilized more mature judgment in picking their sites. They may have had a better background, better local advice or better luck. They are in position to utilize community facilities. They are able to exchange work, equipment and ideas with operating farmers. They fit easily into the established pattern.

Alaska in the foreseeable future will have no need for a program of forced agricultural settlement. No known time-urgency exists in 1955. Families arriving by their own free will and staying on their own initiative will build strongly and firmly.

Government, both national and local, has ample opportunity to regulate rapidity of agricultural progress whether in the Matanuska Valley or elsewhere. A program of attrition, or a series of unrelated programs, would hinder progress. A program of practical assistance will encourage a gradual change from wilderness to developed agricultural communities.

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- 5 Higgins, F. L., Oat Production in Alaska, U. S. Department of Agriculture, Alaska Agricultural Experiment Stations, Bulletin 10, 1932, p. 3.
- 6 U. S. Department of Agriculture, Alaska Agricultural Experiment Stations, Report of the Alaska Agricultural Experiment Stations, 1927, 1928, pp. 3-4. Also, Report of the Alaska Agricultural Experiment Stations, 1928, 1929, pp. 1-2.
- 7 Alaska Agricultural College and School of Mines, Agricultural Experiment Station, Progress Report, January-December 1933, pp. 28-29. (Also: Progress Report, January-December 1934, 1934, pp. 26-28.)
- 8 University of Alaska, Agricultural Experiment Station, Progress Report, January-December 1935, 1935, p. 28.
- 9 U. S. Department of Agriculture, Alaska Agricultural Experiment Stations, Report of Alaska Experiment Stations, 1929, 1930, p. 2.

10 Bone, Scott C., Report of the Governor of Alaska to the Secretary of the Interior, 1922, 1922, p. 13.

11 Minutes of the Matanuska Valley Settlers Association, March 14, 1924, George Hatcher, Secretary.

Chapter VII

1 U. S. Department of Agriculture, Alaska Agricultural Experiment Stations, Report of the Alaska Agricultural Experiment Stations, 1927, 1928, p. 5.

2 Alaska Railroad, The, Alaska, The Newest Home Land, 1930, p. 13.

3 A charge was made to the settlers for wages of the operator.

Chapter VIII

1 Most of the information in this chapter is gleaned from Stone, Kirk H., Alaskan Group Settlement: The Matanuska Colony. Bureau of Land Management, U.S.D.I. 1950. Wash., D.C. 95 pp. processed. The remainder has been found in records of the Alaska Rural Rehabilitation Corporation or has resulted from discussions with various persons who were associated with the Colony during this period. Although the authors have drawn heavily on Stone's research it is understood that they solely are responsible for the accuracy of statements or interpretation contained herein.

2 Land was reserved for the Colony on February 4, 1935 under Executive Order 6957. The reserve included the area from Knik Arm northward to the Talkeetna Mountains and from the eastern edge of The Valley westward three to nine miles beyond Wasilla. On May 20 Executive Order 7047 was signed to permit settlement in the reserved area in order that colonization could proceed. Two additional Executive Orders reserved about 16 sections of Knik Arm tidal flats as pasture for cattle and as a source of hay. Reductions later were made in the Colony reserves.

Certain colonists acquired land under Executive Order 7416 which permitted them to homestead where tracts had been publicly-owned before a reserve was established. Most such tracts were in the Butte District in the Southeastern corner of

The Valley. An Act of October 17, 1940, provided for additional settlement by purchase of vacant land, at \$1.25 to \$5.00 per acre. Purchases were to be made at the District Land Office in Anchorage but only with prior approval of the ARRC.

- 3 A replacement colonist family simply was a volunteer family willing to accept ARRC conditions for settlement on already established Colony tracts.
- 4 It should be re-emphasized that, although over 11 townships were reserved for the Colony, every acre in Colony Tracts was purchased by the ARRC. This included patented lands, school lands and public domain.
- 5 This loss which occurred in 1936 was inventoried the next day as \$12,107.08 and was so recorded in the 1938 audit. Four years later the loss was reaudited as \$313,268.85.

Chapter IX

- 1 Mr. Walter H. Evans of the Office of Experiment Stations, U. S. Department of Agriculture, Mr. Benton Killin of Portland, Oregon and Dr. Sheldon Jackson for the Department of the Interior. Dr. Jackson studied the Yukon River region and the others studied the coastal areas,
- 2 The station at Copper Center was closed in 1906, Kenai in 1908, Kodiak and Rampart in 1925.
- 3 Gasser, G. W., A Brief Account of Agriculture in Alaska, in Proceedings Second Alaskan Science Conference, 1951, p. 91.
- 4 Report on Exploratory Investigations of Agricultural Problems in Alaska. ARA, USDA, Miscellaneous Publication Number 700, 1949, pp. 2-4.
- 5 A fur experimental station had been established at Petersburg in 1938.
- 6 University of Alaska, Agricultural Experiment Station, Twelfth Progress Report, 1947, p. 26. This sum, however, included only \$7,500 of Territorial appropriations for conducting experimental work.

- 7 Research and Alaskan Agriculture. 15th and 16th Progress Reports. Alaska Experiment Station, October 1953, p. 31.
- 8 Unpublished data.
- 9 Estimated Value of Farm Products Produced in Alaska in 1952. C. G. Sherman, Commissioner of Agriculture, 6 pp. mimeo. January 15, 1953.
- 10 Moore, C. A., Farming in the Matanuska and Tanana Valleys of Alaska. Alaska Experiment Station Bulletin 14, January 1952, p. 19.
- 11 Andrews, R. A., Dairy Farming in the Matanuska Valley, 1952. Alaska Experiment Station Mimeo Circular 5, October 1953, p. 5.
- 12 Sweetman, W. J., Herd Management Tips to Dairymen. Alaska Experiment Station Special Report No. 4, December 1954.
- 13 Fifth Biennial Report. Alaska Department of Agriculture, James W. Wilson, Commissioner.
- 14 Ibid., p. 9.
- 15 Bennett, Hugh H. and Thomas D. Rice, Soil Reconnaissance in Alaska, with an Estimate of the Agricultural Possibilities. Field operations, Bureau of Soils, U.S.D.A. 1914.
- 16 Rockie, W. A., Physical Land Conditions in the Matanuska Valley Alaska. SCS, Physical Land Survey No. 41, U.S.D.A. Washington, D.C. 1946.
- 17 Land classes II, III and IV under the standards of classification used by the SCS. Alaska's climate precludes any Class I land under SCS definitions. Class II is good land which can be cultivated safely with easily-applied protective methods. Class III is moderately good land that can be used regularly for crops in a good rotation, but needs intensive treatment. Class IV is fairly good land best maintained in perennial vegetation but can be cultivated occasionally with care.
- 18 Unpublished data from records of the Alaska Soil Conservation District.

- 19 Minutes of Meeting, February 29, 1952, Agricultural Advisory Committee, C. W. Wilson, Secretary.
- 20 The sum of \$99,100 represents monies loaned to persons in the States who subsequently moved to Alaska without settling their accounts with the FHA. These funds never were used to assist development of agriculture in Alaska. Much of this account was uncollectable before the borrower moved to Alaska and little of it is collectable now. None of these persons is a borrower from the program in Alaska.
- 21 Peters, C. W., A Report on the Activities and Current Status of the Matanuska Valley Farmers Cooperating Association, Palmer, Alaska. (Typescript) FSA-USDA, July 1946.
- 22 The Matanuska Valley District of the Alaska Road Commission stretches from Eklutna Crossing on the south to Mile 66 on the Glenn Highway and includes all Valley roads.
- 23 The plan called for 144 tracts of 40 acres and 52 of 80 acres.
- 24 This list, bearing no date, probably was prepared in August or September of 1935 after several original colonists had left and a few replacements had taken their places according to Don L. Irwin, first Corporation manager.
- 25 Homesteading and homestead development have continued in the Valley since 1950. Several years must elapse before it will be known whether recent arrivals will succeed.

Chapter X

- 1 Based on 202 families brought here during May and June 1935 the figure would be considerably lower. This statement is based on 185 families on the rolls in August or September 1935.

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