THE CUSTOM CUTTERS: A HISTORY OF CUSTOM COMBINING ON THE GREAT PLAINS

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PREFACE

To farmers on the Great Plains custom combining is an accepted institution, one so taken for granted that its origins are obscure. This study refreshes the memory of those beginnings and traces the development of the business to the present.

The subjects of the study are known variously as "custom combiners," "custom harvesters," "contract harvesters," and "wheaties," but most often as "custom cutters." Owners of combines may do custom work locally, but I focus here on itinerant custom cutters who travel north with the harvest. The geographic scope is the Great Plains of the United States, with occasional attention to parallel developments in Canada. My perspective is frankly environmental, interpreting custom combining as one of the many peculiar adaptations that characterize life on the Great Plains.

Sources for writing the history of custom combining are massive and yet fragmentary. I have made certain decisions as to documentation that should be explained. Sometimes generalizations in the text were based on too many sources to list, and so I have cited only the most important sources. This was necessary because there were few secondary sources to rely on. In other cases the text may run for pages without a footnote. Many of my statements about the operations and lives of custom cutters stem from personal observation of work in the field and informal conversations with harvesters in such places as elevators or

cafes, contacts too informal to be termed "interviews." To footnote personal observation seemed pompous.

This work should be regarded as broad and exploratory. Economists, geographers, and sociologists someday may launch more specialized and structured investigations of custom combining. I have carried the inquiry far enough to draw some significant generalizations.

Thanks beyond words are due to Dr. Norbert Mahnken, director of this dissertation, whose guidance and help made difficult situations manageable. Dr. LeRoy Fischer has given me far more than I can hope to repay. I also appreciate the graciousness and aid of Dr. Thomas Kielhorn, Dr. James Henderson, and Dr. James Smallwood, committee members. The entire staff of the Edmund Lowe Library has been tireless in searching out even the most obscure sources for me, but I must single out the enormous efforts of Vicki Phillips, John Phillips, and Terry Bassford. Debra, my wife, knows how grateful I am for her work in making this manuscript presentable.

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CHAPTER I

HARVESTER'S HERITAGE: THE BACKGROUND OF CUSTOM COMBINING ON THE GREAT PLAINS

Custom cutters seldom are introspective. Year by year they follow the yellow road of the wheat belt north, giving little thought to the circumstances that brought their occupation into being. Yet the same conditions still affect their lives, dictating practices for them and for the farmers on whom their business depends.

Residents of the Great Plains engaged in agriculture or related pursuits such as contract harvesting are buffeted by forces both environmental and economic, often contradictory, always beyond control. They do not create their geographic environment, but rather adapt to their surroundings. Neither can any individual alter the national agricultural economy, for farming is such a competitive and individualistic industry that no one operator can affect the market.

The development of wheat farming on the plains showed the interplay of these forces. Wheat became the staple because it was suited to the area. Farmers on the southern plains needed a crop that would make use of spring rains, mature early, and be in the bin before the hottest days of summer arrived. After attempts to grow corn, settlers in Kansas in the 1870s turned to soft winter wheat, and then during the next decade to hard red winter wheat.[1] Farmers on the northern plains required a crop that would flourish with a short growing season and

limited rainfall. Their answer was spring wheat, first soft spring wheat carried from the prairies to the east, and then the better adapted hard spring wheat.

Improvements in wheat varieties and in farming practices enabled farmers to push the wheat frontier west on the high plains of the United States and north and west in the prairie provinces of Canada. Methods of tillage evolved from the dust mulch espoused by proponents of dry farming at the turn of the century to the protective stubble retained by practitioners of no-till farming in the 1970s. The transition from horses to steam engines to gasoline tractors allowed ordinary family farmers to overcome problems of scale that had hampered even the most efficient of the bonanza farmers of the nineteenth century.

Although such improvements in technology made expansion of wheat-farming feasible, it was the vagaries of weather and of the agricultural economy that determined when farmers extended or retracted the wheat frontier. Drought and depression ended the agricultural boom of the 1880s, but soaring prices for grain during World War I brought a new wave of sodbusting that spilled onto the high plains. With increased mechanization the plow-up continued despite hard times in the 1920s, ushering in the disastrous dust storms of the 1930s. The relentless cycle recurred twice more: farmers broke new ground when World War II brought high prices, and they suffered blow-outs in the early 1950s; when prices spurted upward due to exports in the early 1970s, fencerow-to-fencerow planting brought dust storms back once more. Worse yet, along with each reversal in the weather came a collapse in the market for wheat. So although technological improvements for farming on the plains were continual, they were implemented in a series of surges.

This trend also was evident in particular aspects of wheat farming on the plains such as harvesting and threshing. Changes in techniques of harvesting and threshing followed two general paths. Methods became more mechanized and capital-intensive, decreasing the need for unskilled laborers, as was the case in all commercial farming in the United States. In addition other innovations occurred in response to the peculiar needs of farmers on the plains. Both types of modifications received their impetus from the same cycles of boom and bust that affected wheat farming as a whole.

In any area of the Great Plains, prior to the development of transportation to markets for grain, harvesting went through a pioneer stage of improvisation. Settlers used whatever means they could to gather a small crop for local use. On the eastern fringe of the plains they often relied on the scythe and cradle to garner grain. Behind the blade of the scythe swung rhythmically by stooped shoulders, several thin fingers of wood caught the falling stalks. The cradler left the grain in piles, and a second man followed behind to tie the piles into bundles. Even on the high plains, in areas broken during the early twentieth century, methods of harvesting were primitive at first. Some pioneers in the Texas Panhandle tied a cowhide behind a wheel-driven mowing machine to catch the falling grain and then left it in mounds to be tied into bundles or handled loose.[2]

Such methods gave way to more sophisticated ones as soon as farmers gained access to markets. By the time settlement moved onto the plains in the 1870s, techniques of harvesting in the Midwest had become standardized. Farmers harvested small grains with a binder, a horse-drawn implement with a sickle like a mowing machine and a

revolving reel to sweep the grain across the sickle. The cut grain fell on a platform or table with a revolving canvas belt that carried it to the side and elevated it to a mechanical knotter which tied the grain into bundles. These were dropped in the stubble behind the binder, and shockers or stookers followed behind to shock them. The farmer either allowed his grain to stand in the shock until time for threshing or hauled it to a central location to be stacked.[3]

This system worked well over most of North Dakota, South Dakota, and western Canada, as well as in the eastern portions of the central and southern plains, but in other parts of the plains it broke down under environmental pressures. As early as the 1870s, farmers in central Kansas discovered that in years of little rainfall, the wheat straw was so short that binders failed to tie good bundles.[4] Harvesting with a binder also required the seasonal services of numerous horses and men--binder drivers, bundle wagon drivers, shockers, and stackers. Farmers therefore adopted the header, which tied no bundles and could be operated with fewer men and horses.

The header was a wonderfully simple machine. It had a sickle, a reel, and a table like those of a binder, only wider. The sickle snipped the wheat stalks close to the head, and the loose heads moved up a chute by means of a canvas conveyer belt and dropped into the bed of a wagon moving alongside. Because the header was wider and heavier than the binder, it could not be pulled to the side of the drawbar, but instead was pushed from behind by a team in traces. The header eliminated the need for shockers, for the wagon drivers hauled the grain directly to stacks. Economies of scale favored the header over the binder in areas of large acreages like the Great Plains. The header

supplanted the binder over most of the southern and central plains, as well as in western Montana and in some of the western parts of the Dakotas.[5]

The binder held its own against the header in most parts of the Dakotas and in Canada because of differences between winter wheat and spring wheat. Winter wheat ripened evenly. Farmers therefore entered the fields with headers shortly before the wheat became dead ripe, confident that there would be no grain in the field so green that it might cause their stacks to heat and spoil. Spring wheat ripened unevenly, and if not allowed to dry in the shock, spoiled in the stack. Farmers thus forced to rely on the binder consoled themselves with the knowledge that they were able to begin harvesting grain at a greener stage than those using the header.[6]

Like harvesting, threshing on the plains also went through an isolated, primitive stage. Some farmers separated the grain from the straw by beating it with a flail, a staff with a crosspiece attached, and then throwing the grain into the air to let the wind drive out the chaff. Others used horses or oxen to tread out the grain. Stationery threshing machines provided the capacity needed by commercial farmers on the plains once they had access to markets. Until the 1890s these generally were powered by draft animals walking in circles to turn drive shafts. Thereafter steam engines furnished power to drive larger separators.[7]

Methods of threshing on the plains, like those of harvesting, settled into patterns unlike those farther to the east. In the Midwest the practice of cooperative threshing came into its own in the early twentieth century. Either some local farmer owned an engine and a

separator, or a group of men pooled their resources and purchased machinery jointly. Each summer the farmers in the area turned out to thresh each other's grain, trading labor and getting full use from the single threshing outfit, proceeding with the work according to the bylaws of their threshing cooperative.[8]

On the Great Plains cooperative threshing gained few footholds. Instead it became the practice for some aspiring capitalist in each locality to buy an engine and a separator, generally one larger than those in use in the Midwest. The thresherman assembled a crew of workers and offered his whole outfit, machinery and labor, to farmers for custom threshing of the grain they had harvested. The thresherman charged for work by the bushels threshed. Farmers on the plains found custom threshing suited to their needs. The extensive nature of wheat farming there meant that they needed large threshing capacity, but they were hesitant or unable to invest the amount of money necessary to buy a large thresher and a powerful engine. The thresherman provided machinery at reasonable cost and only when it was needed. He furnished expertise in the form of his engineer and his separator man, individuals skilled in handling the machines they prized, and he relieved the farmer of the responsibility for recruiting the numerous laborers required for threshing. Custom threshing reached its peak during World War I and the early 1920s.[9] The great steam engines were symbols of mechanical prowess. The panorama of a summer's morning in the wheatlands was enough to convince anyone of the distinctive nature of agriculture there: fields of stubble stretched in all directions, with stacks of headed wheat grouped here and there like loaves on a table, or else shocks of bound grain standing in military lines; the smell of

burning coal or straw was in the air, columns of smoke rose from engines building pressure, and steaming whistles summoned laborers to the stacks.

Harvesting and threshing on the plains depended on migratory labor. Intensive demand for transient labor developed at successive points from south to north as the summer's harvesting and threshing progressed. The workers who met the demand came mostly from the states of the Mississippi River valley. Farmers made the harvest in hopes of supplementing their income in poor years, urban workers gambled on the chance of making high wages for a few months, and students hoped to earn enough money to support another year's schooling. By the early 1920s perhaps 100,000 men made the harvest. The United States Employment Service assumed the task of recruiting workers and directing them where they were needed, as did the Canadian Department of Labor. No one bindlestiff worked his way all the way from Texas to Canada, but most moved from south to north for some distance. The workers sought to travel as little as possible by first aiding some farmer in his harvest and then joining a threshing crew to work in the same area for the rest of the summer. Most threshermen moved their outfits only short distances within their own localities, although an occasional entrepreneur might first thresh in the winter wheat region and then ship his machinery north by rail for a second season in the spring wheat region. Nearly all laborers, however, found it necessary to travel with the harvest in order to stay at work.[10]

The coming of the combined harvester, or combine, suspended prevailing traditions of the harvest. The rapid adoption of the new machine on the plains again exemplified the evolution of distinctive

practices of harvesting in the area. An invention developed in other parts of the country was adapted to fit the needs of farmers on the plains and then was implemented at a time when economic conditions demanded it.

The inventors of the first working combined harvester were Hiram Moore and John Hascall of Kalamazoo County, Michigan. After the inventors tested their machine in the late 1830s, Andrew and Abner Moore (no relation to Hiram Moore) operated combines built according to the original design in Michigan at least until 1853. These men were the first custom combiners, cutting wheat for various farmers in the area. The early combines in Michigan threshed well, saved labor, and proved economical. They incorporated most of the mechanical principles basic to later combines. A reciprocating sickle cut the stalks, a toothed reel pushed the grain onto the platform, and a canvas apron delivered it to a threshing cylinder. Screens and a fan cleaned the grain. The combine's header, twelve feet wide, extended to the right of the machine. Sixteen horses supplied power for the combine, for its moving parts were driven from a ground wheel. A driver walked beside each pair of horses. A wagon drawn alongside received the sacks of grain threshed.

Although competition from the inexpensive reaper prevented the general adoption of the combine in Michigan, an unusual train of events established it in California, where expansive wheat ranches offered golden wealth to rival that of the mines. In 1854 Andrew Moore and a partner named George Leland shipped a combine around Cape Horn to California. Leland that year combined about 600 acres for wheat ranchers on a custom arrangement, but his clients failed to pay him for

the work. After a year prospecting for gold, Leland sold the combine in 1856. His son then operated the machine for the new owner, but when he neglected to grease the joints properly, heat from friction ignited a fire that destroyed the combine.[11]

From this apparent false start the combine took root in the Golden State. Local mechanics and farmers had been impressed enough with the machine operated by Leland that by the late 1850s they had constructed more combines along similar lines. By the early 1860s the Monitor combines built by John Horner of Alameda County were impressive enough that local harvest workers, fearful of mechanical competition, set fire to one of the combines in the field.

More wheat ranchers in California constructed combines for their own use, and during the 1880s commercial production began. Combines built by Daniel Best, Benjamin Holt, and other manufacturers replaced headers in California in the 1890s, and after 1900 they rolled into the hilly wheatlands of Washington's Palouse Valley. These combines of the far West were cumbersome but effective. Their headers were as wide as twenty feet or more. Thirty-two or more horses or mules pulled each machine, with the driver perched on a tiny chair overhanging the teams. A man sat on a platform on the side of the combine to sew bags of grain shut and drop them into the stubble.[12]

Only a few of these monsters appeared east of the Rocky Mountains prior to World War I. As early as 1901 a sixteen-foot Best combine was used west of Great Bend, Kansas, by F. Neeland Thomas. He celebrated July 4 with a field-to-mouth demonstration, cutting a couple of bushels of wheat and sending it to a local mill. There it was ground into flour and baked into loaves that went on sale in the evening of the

same day. Several other combines harvested in the same region in the next few years, but the time for widespread adoption of the combine there had not yet arrived. Large as were wheat farms in western Kansas, they did not compare with the wheat ranches in California. Moreover, frequent crop failures on the plains made investment in huge combines impractical.[13]

Early, isolated introductions of the combine also took place in Saskatchewan and Montana. A man named Edmunds and another named E. J. C. Shand brought a Holt combine to Spy Hill, Saskatchewan, from California in 1910. They pulled the twenty-foot machine with a tractor. For four years they combined about 600 acres of wheat or flax annually, but they quit farming and abandoned the combine in 1914. Although they pronounced the combine a success, few others paid heed. At the same time Curtis Baldwin, later to become vice-president of Gleaner-Baldwin Corporation, experimented with a homemade combine on his farm near Aneroid, Saskatchewan, from 1913 to 1919. In Montana it was reported that several combines from California were used in 1910 and after, but with little publicizing of the results.[14]

Two conditions were lacking for the combine to make its home on the plains. First some economic jolt was required to force farmers to abandon the headers, binders, threshers, and bindlestiffs to which they were accustomed. Next the ungainly combine had to undergo adaptation according to the specific needs of farmers on the plains.

World War I provided the economic stimulus. Rising prices for grain brought an advancement of the wheat frontier. Conscription and defense work absorbed many of the seasonal laborers farmers required. Fewer hands were available to harvest more acres, and so in 1917 and

1918 farmers on the southern plains purchased combines, reluctantly at first. The combines they chose were known as prairie models, with headers of from twelve to sixteen feet. These filled the need for swift harvesting with limited labor, but were not so large and expensive that the investment was prohibitive in that time of prosperity. Prairie combines were pulled by either horses or tractors, and they had auxiliary engines mounted on them to replace ground wheels in driving the threshing parts.[15]

Sales of combines increased rapidly after the war; although hard times came in 1921, farmers had seen the benefits of the new machines. This was part of the general trend toward mechanization in wheat farming at the time. Kansas, with more winter wheat than any other state, also had the most combines. Farmers there purchased about 1,500 combines in 1919 and 1920. By 1926, according to the Kansas State Board of Agriculture, 8,274 combines were in use in the state, harvesting more than 30% of the acreage in wheat. By 1930, 27,000 of the 75,000 combines in the United States were in Kansas. By this time some of the machines were combines with headers eight feet or less in width, designed to be driven by the power takeoff of a tractor and to be used in the Midwest. Farmers with limited capital and acreage used these smaller combines, which came on the market in 1926.[16]

Other states of the southern plains adopted the combine at about the same time. Seven combines harvested in northwest Texas in 1919; by 1927, 2,682 were reported there. Comparable figures were unavailable for Oklahoma, but by 1926 researchers at the state experiment station considered the use of the combine in the state "past the experimental stage" and "the most economical method of harvesting wheat when conditions are favorable for its use."[17]

By 1926 the combine's impact was such that the United States Department of Agriculture made a survey of its use on the southern plains and in the Judith Basin of Montana. This important study, published in 1928 as "The Combined Harvester-Thresher in the Great Plains," amounted to an official blessing for the combine. The study focused on five counties, one each in Texas, Oklahoma, Kansas, Nebraska, and Montana.

The survey clearly showed the types of combines gaining acceptance on the plains. Machines with headers of sixteen feet made up nearly 40% of the sample of 268 combines found, with twelve- and fifteen-foot sizes also popular. Many of the machines had come equipped with a smaller header and had been fitted with extensions to widen the swath. Nearly all the combines by then were drawn by tractors. The cost of a prairie combine was from $2,000 to $3,000, but a power takeoff model might be bought for as little as $1,000. Most of the combines in use had been purchased within the past two years.

Operators of combines harvested mostly wheat, but also had success with other crops, especially grain sorghum or milo. The popular sixteen-foot model was found to harvest an average of 682 acres in a year. An acre of wheat that required 2.8 man-hours to harvest and thresh with a header and a stationery thresher could be gleaned in only .75 man-hours with a combine. Grain losses were less with the combine, as was the total cost of harvesting and threshing.[18]

Despite the approval of the Department of Agriculture, the combine gained acceptance on the southern plains only by overcoming initial objections and problems. Because wheat had to be dead ripe before it could be cut with the combine, use of the machine delayed the beginning

of harvest, increasing the likelihood that a hailstorm might level the crop. Farmers found that they could not hurry their wheat, but had to wait until it had dried to a moisture content of about 15% or it would spoil in the bin. In wet years weeds in the fields caused problems, because seeds and stalks of weeds in the grain increased the moisture content. Storage at elevators and on the farm had to be handled more efficiently, because while threshing had gone on all summer with stationery separators, with combines all the wheat was threshed during a short harvest period and required storage immediately. Millers at first were prejudiced against wheat harvested with a combine and graded it down. The surmountability of these problems, however, was expressed best by L. C. Aicher of the agricultural experiment station at Fort Hays, Kansas, when he said, "It isn't the fault of the combine so much as the fact that we are inexperienced in the handling of the combine."[19]

Conditions on the northern plains were somewhat different, but Montana provided the combine a path of entry into the area. In 1917 the Montana Farming Corporation, soon to become the famous Campbell Farming Corporation, near Hardin, bought four combines, but by the end of World War I there probably were not fifty combines in Montana. Although a few farmers bought combines each year thereafter, still only 144 were sold in 1925. Sales increased rapidly in the next few years, as the combine entered every part of the state where wheat was grown, and 1,685 were sold in 1928. The combine succeeded in the winter wheat region of Montana for the same reasons as farther south, and to an even greater degree: farms were larger, and workers fewer. Moreover, farmers raising both spring wheat and winter wheat could extend the use of their machines over two harvests.[20]

Spring wheat farmers in the Dakotas delayed in adopting the combine for much the same reasons they had preferred the binder over the header. Their spring wheat ripened unevenly, was plagued by weeds, and often had a rank growth of straw. If a farmer postponed harvesting until all the grain in a field was ripe enough for combining, then the weeds flourished and the grain lodged. In addition the farms of the Dakotas were smaller than those of Montana.[21]

Manufacturers responded to the complaints of farmers and researchers in the spring wheat region by offering the windrow harvester in 1927. In 1926 managers of the Campbell Farming Corporation had improvised windrowers by hitching binders in staggered formation with the tying mechanisms removed and with extension elevators delivering the cut grain to a single windrow. They had threshed the windrows using Holt combines with the headers removed and with hay-loaders lifting the grain into the threshers. Some of the first windrowers offered for general sale in 1927 discharged the cut grain at the end of the platform, others at the middle. Most were powered from a ground wheel, although after a few years models connected to the tractor power takeoff were more common. Soon manufacturers added pans from which the grain slid gently onto the stubble, so that it would not fall through to the ground. Suspended a few inches from the ground, the grain dried until it was picked up by a combine fitted with a pickup header, one with wire teeth that lifted the grain onto the platform.

Windrowing reduced shattering, farmers believed; it also allowed both wheat and weeds to dry uniformly in the windrow. The windrower was the machine for impatient farmers who could not stand to watch while neighbors started their binders. Windrowers could enter the

field just a couple of days later than binders, and combines could begin picking up windrows before grain in the shock was ready for threshing. The only problems were the increased expense of windrowing and the possibility that heavy rains might drive windrows to ground.[22]

The windrower prompted introduction of the combine in the Dakotas, although the binder remained in use for several decades. There were only about 180 combines in South Dakota and 200 in North Dakota in 1927. The next year the figures were 648 for South Dakota and 1,172 for North Dakota. Combines generally were smaller in the Dakotas than in the winter wheat regions. About two out of five were power takeoff models, the rest prairie models, with the power takeoff machines more prevalent in the eastern parts of the states.[23]

Combines won their way into the spring wheat regions of western Canada at about the same time as in the Dakotas. In 1922 Massey-Harris Company placed a twelve-foot combine on the Dominion Experimental Farm at Swift Current, Saskatchewan, while International Harvester Corporation placed one at the experimental farm at Cabri. Although generally it was thought that the short harvesting season would make combines impractical in the prairie provinces, they performed admirably in trials during the next six years. Officials of the experimental station at Saskatchewan aided in establishing the combine in the region by publicizing the favorable results of their tests, findings supported by farmers trying the machine at the same time.

Early users of combines in western Canada, who bought them despite warnings even from implement dealers of the unsuitability of the machines, practiced straight-cutting of their wheat with great success. The number of combines in western Canada swelled from just four in 1924

to 791 in 1927. With the advent of windrowing, the number jumped to 4,448 in 1928 and to 9,562 in 1930. About two-thirds of the machines in 1930 were in Saskatchewan, and most were in the prairie lands of the province rather than in the parklands. Farmers of large acreages adopted the combine first, generally favoring models with fifteen- or sixteen-foot headers, but as smaller farmers also became owners, twelve-foot prairie models and ten-foot power takeoff models became more prevalent. According to a survey in 1928, 44% of the combine operators in western Canada practiced straight-cutting only, while most of the rest both straight-cut and picked up.[24]

Combiners in Canada also devised another invention to extend the use of the combine--the header-barge, used only on a limited basis in both Canada and the United States. The header-barge was a rick on skids which was drawn through the field beside a header and which received the cut grain from the header elevator. When it was filled, the driver tripped the rear slats to leave a great loaf of grain on the ground. The header and barge could be used as early in the season as the binder. Farmers threshed the stacks by driving a combine up next to them and pitching the grain onto the platform.[25]

Use of the combine was proven practical in both the winter and spring wheat regions in the 1920s. Among winter wheat farmers harvesting with the combine was almost universal before 1940. For spring wheat farmers the transition to the combine was slower, arrested by depression during the 1930s. In 1938 a survey of eight counties across North Dakota showed that only about a fourth of the wheat in the state was harvested by combine, about half of this being windrowed and picked up and about half being straight-cut. Farmers in the eastern and

northern portions of the state used the combine the least, and when they did, generally also used the windrower. Farmers in the western and southern parts of the state were more favorable to the combine and practiced straight-cutting, but even there most still clung to the binder. In Kansas, on the other hand, conversion to the combine was nearly complete by this time. Almost nine-tenths of the wheat in eight sample counties was combined, nearly all by straight-cutting, and in western counties, as much as 99% was combined. Only continued use of the binder in some eastern counties kept down the total percentage of combined grain in the state. Thus, north and south, the combine was more prevalent on the high plains than in transitional areas just to the east. On the southern plains the combine had routed the army of harvest hands which previously had possessed the country, much to the delight of farmers, who were released from the care of recruiting workers, and farmers' wives, who were freed from the burden of cooking for a harvest crew and from the worries attendent to having strange and disreputable men about the place. Farther north large numbers of bindlestiffs still were needed--nearly 30,000 in North Dakota in 1938.[26]

Adoption of the combine brought changes in methods of farming. Its users found it necessary to "farm for the combine": to ensure even ripening they sowed better seed at a uniform rate at a consistent depth; to facilitate harvesting they battled weeds and removed sticks, stones, and furrows from the fields. The combine also contributed to the evolution of larger farms on the plains and to the rapid mechanization of them. With the bottleneck of harvesting and threshing cleared, farmers expanded their acreage. They also purchased more tractors to pull the combines and to work the additional acres. Not only

harvesting, but also wheat farming in general became more capital-intensive with the advent of the combine.[27]

Effects on the organization and the psychology of the harvest also were profound. Prior to the coming of the combine, harvesting was a more protracted process. Binding and heading started while the wheat was still green and continued after it was dead ripe. Threshing lasted all summer, as the custom threshing outfit moved from farm to farm in turn. This was little cause for worry, for grain in the stack was safe.

The combine made farmers more impatient and hasty. The wheat had to be combined quickly as soon as it was ripe enough, whether it was standing or in the windrow. Delay meant possible losses from hail, lodging, or collapsed windrows and sure losses from shattering. Cooperative ownership of combines on the plains therefore was not feasible, for one owner would have to wait anxiously while the other's wheat was being combined.

The precedent for custom operation of costly machinery already had been established by threshermen, and so custom combining was a logical development. Often the same man who had owned a threshing rig was also an early owner of a combine in his locale. The owner of a combine generally first cut his own wheat and then combined for his neighbors. The other farmers kept their binders and headers in case the custom cutter was too late getting around to them. In some cases special types of custom work were available. Sawflies, hail, frost, or some other natural disaster sometimes either damaged crops so severely that it would not pay to bind and thresh them or else tangled the straw so badly that a binder could not tie bundles. Then farmers sometimes hired custom combiners to salvage what they could of the crop. There

were reports from Alberta of combines saving from six to fifteen bushels of wheat to the acre in fields on which the government's crop insurance program already had paid 100% compensation for hail losses.[28]

Custom cutting on a local basis was prevalent wherever there were combines. The study of the combine on the Great Plains by the Department of Agriculture in 1926 found that more than half of the combine owners did custom work. This was of dual benefit: the combine owners defrayed the cost of their machines with custom work, and the farmers who hired their wheat cut got their crops harvested cheaper than by other methods.

Rates received for custom combining varied with the number of combines competing for the business in the area. In Texas rates of $4.00 an acre were reported, and in Montana rates of $2.50, but the general price was about $3.00. Early in the harvesting season farmers were willing to pay higher rates for quick service, but competition from other combines drove the price down in the latter stages of the harvest. At the going rate, and disregarding interest and depreciation, a custom cutter could net about $2.50 an acre for his work. Early custom cutting was a lucrative business.[29]

Separate reports for several individual states emphasized the importance of custom cutting in establishing use of the combine. "The importance of custom cutting cannot be overestimated," said the report for Texas, "since it enables the owner of a combine to lower the cost of harvesting his own grain by earning enough to partially take care of the original investment."[30] In Texas one-third to one-half of the grain combined was custom cut. In Oklahoma more than two-thirds of the owners of prairie combines surveyed did custom work. In Montana about

four-fifths of the combine owners did custom work, even including owners of power takeoff models.[31]

Custom cutting on the local level became so profitable that some men with no small grains of their own to harvest bought combines just to do custom work. In 1927 the Schoelen Brothers, Henry and Frank, of Kingfisher County, Oklahoma, bought a combine, although they had no wheat of their own. By custom cutting 500 acres at $3.00 an acre, they paid for more than half the cost of the combine the first year. Cephus Rachliff of Major County represented a more common type of part-time custom cutter. In 1927 he used his twenty-foot combine to cut his own 200 acres of wheat, and then he cut 400 acres more for his neighbors at $3.00 an acre. As was shown in Oklahoma, financial terms for custom combining were not yet standardized. Most farmers paid a flat rate per acre for cutting, but some paid perhaps $1.50 an acre as a base rate and nine or ten cents a bushel in addition. One custom cutter, Henry Schuerman of Grant County, agreed to cut wheat for $3.00 an acre base rate and five cents a bushel for every bushel more than twenty to the acre, a charge for high yields that foreshadowed what later would become a standard arrangement for custom rates. Sometimes farmers who were in the habit of paying for custom threshing by the bushel insisted on paying for custom combining the same way.[32]

A good example of a local custom cutter was Levi A. Quig, a slight, energetic farm boy from near Duquine in Harper County, Kansas. He bought his first combine in 1926, a twenty-foot No. 1 Rumely with a wooden header. He custom combined for farmers in the area, and he claimed his combine could cover eighty acres in a day. He charged $3.00 an acre, with no provision for high yields because there rarely

were any. Unlike most custom cutters in those days, Quig contracted to haul the grain he cut to storage. He had a Model T truck with a home-made wooden bed and sideboards set out at the top so as to hold more grain, perhaps 100 or 125 bushels to a load. He hauled grain to the elevator for three or four cents a bushel and to the bin for two cents.[33]

During the 1930s the low price of wheat depressed custom rates, but custom cutting went on. Charles Hildebrand, for instance, who lived just inside of Oklahoma south of Kiowa, Kansas, custom cut with a twelve-foot machine for his neighbors during those years. He had no truck to haul grain and received only $1.50 an acre for combining, but by covering perhaps 400 acres in a season, he made a reasonable return for those days.[34]

During the 1930s, in fact, custom combining hesitantly entered a more extensive phase inspired by the progressive nature of the harvest from south to north. Although in any particular area the harvest was a brief affair, especially in the winter wheat region, for the Great Plains as a whole it lasted from the middle of May, when the first kernels hardened in northern Texas, until October or November, when snow erased the windrows in Saskatchewan. It was logical that in order to get the maximum use from expensive equipment, a few bold harvesters would attempt to transport their combines north with the harvest, becoming itinerant, professional custom cutters. The replacement of steel tires with rubber ones on combines made such a movement possible. Farmers as well as custom cutters benefited, for farmers employing traveling custom cutters no longer had to wait while some local combiner first finished his own wheat.

Quig, for instance, after a few years' experience custom cutting in southern Kansas, began to haul his combine to western Kansas after harvesting at home and make a second harvest in Lane County. Travel was slow, but in years when crops were poor at home, he supplemented his income this way. LeRoy Gregg of Hall County, Nebraska, was another traveling custom cutter. He began combining for his neighbors in 1933, and by 1938 he needed a new combine. The only way he could afford the price of $1,660 was to prolong the use of the machine, and since it was rubber-tired, he took it on the road. He took delivery of the new combine, a twelve-footer, at Enid, Oklahoma, and began harvesting there. He then worked his way north to Montana on a series of jobs, cutting his own wheat at home en route. It worked so well that he made it an annual trek thereafter.[35]

An outstanding and unusual example of an early traveling outfit was that assembled by A. J. Nickerson of Bushton, Kansas. Nickerson ran a garage in Bushton and also had franchises for Allis-Chalmers machinery and Firestone tires. So although he was not a farmer, he had everything he needed to set up a custom outfit. Around 1929 he began custom cutting near Bushton and then making a second harvest in Gove County, in western Kansas. In the mid-1930s he added an earlier stop in southern Kansas near Kiowa. His combines, three of them by 1940 or so, were Rumelys in sizes ranging up to twenty feet. Although the outfit took no trucks, Nickerson's mechanics refined methods of traveling with combines and tractors. The front wheel of each combine was lifted off the ground when hitched to the tractor to be towed on the road, and so the combines ran on two wheels and did not weave. The headers were detached from the combines and loaded on trailers hitched behind the

combines. The Model E Allis-Chalmers tractor that led Nickerson's caravan made from fifteen to twenty miles per hour on the road. One of the combines was hitched to what the men called the "Buick tractor"--a Buick automobile fitted with oversized tires and geared down so that it would pull a combine in the field, but still make thirty miles per hour on the highway.[36]

Some of the new traveling custom cutters were heirs of harvesting traditions already venerable in their families. One such was Everett Squires from Lenore, Oklahoma, in Dewey County west of Taloga. He was the son of Earl G. Squires, a farmer who in 1923 surprised his neighbors by hauling home an Avery header-thresher all the way from Canton. The header-thresher was a forerunner of the combine, but amounted to little more than a light threshing machine hitched so as to receive the grain from the elevator of a header alongside. Squires used the machine not only to cut standing grain, but also to thresh bound grain from the shock. He finished his own wheat in 1923 and then did custom cutting and threshing for his neighbors. For the sake of the manufacturers he issued a glowing testimonial: "We are using the Avery Header-Thresher with a sixteen foot header in wheat running 25 to 30 bushels to the acre and with long straw," he said. "The machine is absolutely alright and is running with the best of satisfaction to me." In succeeding years Earl and Everett Squires did custom work also with stationery threshers and with combines.

In 1938 Everett first took combines on the road. His outfit included two Grainmaster 10 Oliver combines and two six-cylinder Chevrolet trucks. Few other outfits were on the road, but he met one using chain-drive trucks customized to pull twenty-four-foot Holt

combines on the road and in the field. Squires took the business seriously from the start. His route the first year carried him to Altus, Thomas, Taloga, and Buffalo in Oklahoma, to Dodge City and Goodland in Kansas, and to Big Springs in Nebraska. Successful in early ventures, he quickly expanded operations. By 1942 Squires had seven Oliver combines ready for the road.[37]

Traveling custom outfits in 1940 as yet harvested an insignificant portion of the wheat on the plains and attracted little attention. They were regarded as a picturesque, but temporary phenomenon. In a study of the harvest in North Dakota in 1938, researchers from the Bureau of Agricultural Economics noted the presence of a few custom cutters from outside the state, but speculated that increased local ownership of combines soon would make such entrepreneurs unnecessary.[38]

Yet interstate custom combining was singularly suitable as a method of harvesting on the Great Plains. The progressive nature of the harvest from south to north and the increasing adaptability of combines to the highway made such a movement feasible. The need of farmers on the plains to obtain the benefits of the combine without suffering the hardship of a heavy capital investment made the movement desirable. The technology for an interstate custom combining industry was available, and the environment was suitable. All that was needed was some stimulation of the agricultural economy to precipitate the innovation. The First World War had helped to spark the adoption of the combine on the plains. Another world war also would prompt momentous changes in the harvest.

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CHAPTER II

HARVESTING HEROES AND ECONOMIC OPPORTUNISTS, 1942-1947

"We are meeting here at a critical point in our world-wide war against dictatorship and agression. It's our way of life or theirs," warned United States Secretary of Agriculture Claude R. Wickard.[1] He was addressing a meeting of wheat farmers in Enid, Oklahoma, on April 28, 1942. The theme of his speech was that patriotic farmers should attune their production to the needs of their country during wartime. The war brought radical changes in American agriculture. Not the least among these was a new system of harvesting wheat on the plains--interstate custom combining by professional harvesters.

The initial effect of the war on wheat farming in the United States and Canada was varied. Although there were immediate shortages of certain other products, the supply of wheat and small grains seemed more than sufficient. A decade of government commodity programs in the United States had accumulated large stocks. In 1941 the United States had a carry-over of 400 million bushels of wheat from the previous year, most of it held by the Commodity Credit Corporation. Storage space in elevators was scarce, but room enough for the year's crop finally turned up: railroad officials shipped all available boxcars west, farmers built granaries on the farm, and elevator operators temporarily piled wheat on the ground when necessary.[2]

The situation in 1942 was even more perplexing, as the carry-over and the crop both were larger than in 1941. When Wickard went to speak in Enid, it was not to ask wheat farmers to produce more, but to ask them to vote in favor of mandatory production quotas proposed by the Department of Agriculture. The quotas were to limit the amount of wheat on the market and thus enable the Commodity Credit Corporation to support the price at a reasonable level. "The job of American farmers is to produce more than they ever have produced before. But it must be more of the things that are needed," Wickard said. "We already have more wheat than we know what to do with."[3] He expected a crop of 800 million bushels to be added to a carry-over of 630 million bushels. The secretary told farmers to store as much wheat as possible in their own granaries--"Wallace's pillboxes," these sometimes were called--and to put their faith in government parity programs. In Canada during the same time, the government was unable to absorb comparatively larger surpluses or to maintain the price.

Governmental efforts nevertheless were too effective in the light of subsequent developments. The grain reserves of the bulging ever-normal granary of the 1930s disappeared with unexpected quickness. As the United States government maintained a system of dual pricing that pegged wheat for feed at a price below that of wheat for flour, large quantities of wheat were fed to livestock. At the same time the governments of the United States and Canada made commitments to countries in western Europe to supply them with grain during reconstruction after the war ended. There was little difficulty in storing the crop of 1943, for not only had there been a large disappearance, but also the yield was lower than expected. The supply of wheat in the

United States in the fall of 1942 had been 1.6 billion bushels, the largest in history, but the disappearance by 1943 also was the largest ever, totaling a billion bushels. The supply in the fall of 1943 was expected to be less than 1.4 billion bushels, with a much larger disappearance expected in the next year. In July officials of the Bureau of Agricultural Economics estimated that the supply of wheat would dwindle to what they considered a minimal reserve in a year.[4]

At that point the United States Department of Agriculture recognized the need for a rapid increase in production to meet immediate and postwar needs for grain. Commodity programs were retained, but they were used to encourage production rather than to discourage it, guaranteeing farmers high prices for increased production. For 1944 the Secretary of Agriculture requested farmers in the Great Plains to seed eleven million acres more wheat than for 1943, an increase of nearly 10%. Farmers responded readily, whether because of patriotism or prices. Fields idle since the 1930s again were planted, summer fallow was decreased, and native sod on the high plains was turned under. Such practices continued for several years, until postwar demands for grain were satisfied in 1948.[5]

While production expanded, farmers tried to deal with what appeared to them to be a shortage of labor, although perhaps they merely had grown accustomed to having plentiful, cheap labor during the two decades previous. Conscription removed many potential workers, while the availability of employment in defense industries prevented any sizeable exodus of laborers into the countryside for the harvest. The shortage of harvest workers was most severe in the spring wheat region, where the combine still was only in limited use. There

schoolchildren and housewives mobilized to save the crops. Merchants and professional men turned out during evenings and on weekends to blister their hands on pitchfork handles, often under the auspices of such organizations as the Rotary.[6]

The expansion of production and the shortage of labor led farmers to attempt to obtain laborsaving machinery, especially for harvesting, but they found such implements scarcer even than bindlestiffs. Steel was subject to strict rationing during the war, and only limited amounts were available for agricultural machinery. Although the War Production Boards of the United States and Canada allocated as much steel as possible to the manufacture of harvesting implements, production could not keep pace with demand. Manufacturers produced 54,296 combines in the United States in 1941, but in 1942 the number dropped to 41,822, and in 1943 to 29,219. Only about a tenth of the total production during these years consisted of the size of combines, ten-foot or larger, wanted by farmers on the plains. Allocations of materials for agricultural implements in 1942 totaled just 80% of the amount used for the same purpose in 1940, and for 1943 only 40%.[7]

Such scarcities set off a scramble to obtain the few available combines. Already in 1942 farmers found that in many places harvesting machinery was unavailable except on the black market. The United States War Food Administration set up a rationing program for farm machinery in 1943. In order to buy any piece of equipment, a farmer first had to obtain a purchase certificate from his county war board, a local committee set up by the War Food Administration. The shortage of combines was severe in 1943, even before the great expansion in wheat production. Implement dealers on the southern plains bought used

combines from farmers at top prices after the harvest there, often sending agents around to farms to bid on the machines. Then they shipped the combines north for resale in the Dakotas, where anxious farmers paid almost any price asked. One dealer from Kansas claimed to have shipped twelve flatcars loaded with combines north; a buyer from Oklahoma and a dealer in North Dakota arranged to market seventy combines; a dealer from Missouri dispatched 120 machines north. Perhaps thousands of combines thus were shifted from south to north.[8]

The shortage intensified in 1944 with the boom in wheat farming. The War Production Board eased strictures on the use of steel for harvesting machinery enough for manufacturers in the United States to produce 43,604 pull-type combines, 6,051 of them in sizes greater than ten-foot, along with 1,100 self-propelled combines.[9] Unfortunately most of these were not yet available early in the harvest. This caused particular problems for farmers on the southern plains who had sold their combines to dealers for resale in the north, believing that new machines would be ready for them in 1944. The situation perhaps was only just deserts for such careless opportunists, but the country needed their wheat anyway. Shortages and dislocations in the supply of combines eased only gradually until by 1948 production caught up with demand.

A result of these circumstances in the years 1942 through 1947 was the rapid development of interstate custom combining, an arrangement that eased shortages and saved farmers from losses. Custom combining was the one measure short of ownership and operation of combines by the government that could obtain the fullest possible use from an implement in short supply. A class of mobile, professional harvesters developed

during and after the war. In a way they were like the bindlestiffs who earlier had ranged the length of the plains and who still were important in the spring wheat region. They had the same mobility, and they provided farmers with seasonal labor. In other respects the custom cutters were like the threshermen, furnishing capital and expertise for hire along with workers. Yet the custom cutters were a new sort of entrepreneur, neither as footloose as the bindlestiffs, who had only their own strong arms to offer and only their own selves to care for, nor as parochial as the threshermen, who never left their own localities.

Stalwarts of the movement were the few harvesters who had begun traveling with their machines during the 1920s or 1930s, like Quig, Gregg, Nickerson, and Squires. They generally expanded their activities during and immediately after the war, adding to their machinery, working a longer season, or both. Levi Quig, the custom cutter from Duquine, Kansas, lengthened his route so as to include not only southern Kansas and western Kansas, but also the Nebraska Panhandle. Leroy Gregg of Nebraska bought a second combine in 1942, and so his outfit included two tractors, two grain trucks, and two panel trucks. From Oklahoma he worked north to Saskatchewan, where he harvested until December. The next year, with workers scarce, he added his two teenage daughters to his crew as truck drivers. Before the season was finished he had added a third combine and had worked his way through North Dakota and Montana. A. J. Nickerson's outfit from Bushton, Kansas, sporting its three Rumely combines, began to cover an impressive harvesting circuit--to Kingman, Bushton, and Grinnell in Kansas, on to Bird City and Alliance in Nebraska, next to Martin in South Dakota, and

finally to Mott and Minot in North Dakota--nine stops, ending in a homeward drive of 700 miles.[10]

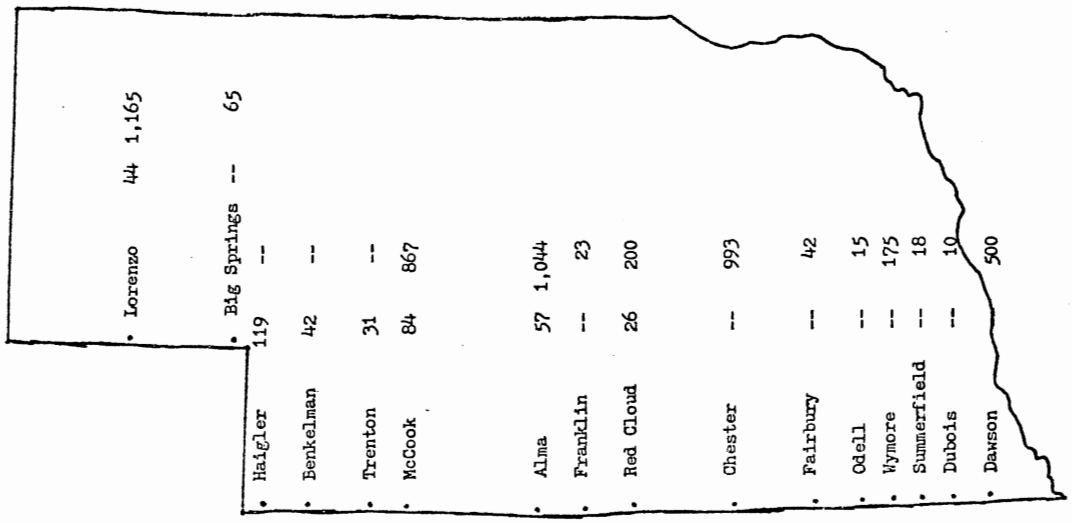
Everett Squires of Taloga, Oklahoma, in particular was ready to exploit the situation during the war. He already had seven Oliver combines and seven trucks which he had accumulated in the years just prior to the war, before the price went up. Although classified 1-A by the Selective Service, he received a deferment in order to continue custom cutting. During the early 1940s Squires employed a crew of from seventeen to nineteen men each year. He already had as large an outfit as he could handle and covered a lengthy route, but in 1946 he began the conversion of his fleet to self-propelled combines, purchasing two that year.[11]

Thousands of newcomers joined these pioneers and made custom combining an important part of the agricultural economy of the Great Plains. The swelling of the movement started in 1942, as the first shortages of machinery and labor began. During 1943 and 1944 the increase was more dramatic, as the harvest assumed a tone of emergency and patriotism, as well as economic opportunism. At the close of the war in 1945 and in the postwar years of 1946 and 1947, custom cutting still increased. Shortages of machinery eased, but high prices for grain kept the combines for hire busy. Farmers also bought their own machines during the flush times, however, and when the price of grain broke in 1948, custom cutters suffered. Like farmers, they had expanded to excess during good times.

Statistics compiled by various governmental agencies during the years of expansion of custom cutting testified to the growth of the industry. In 1942 the business was significant enough that the United

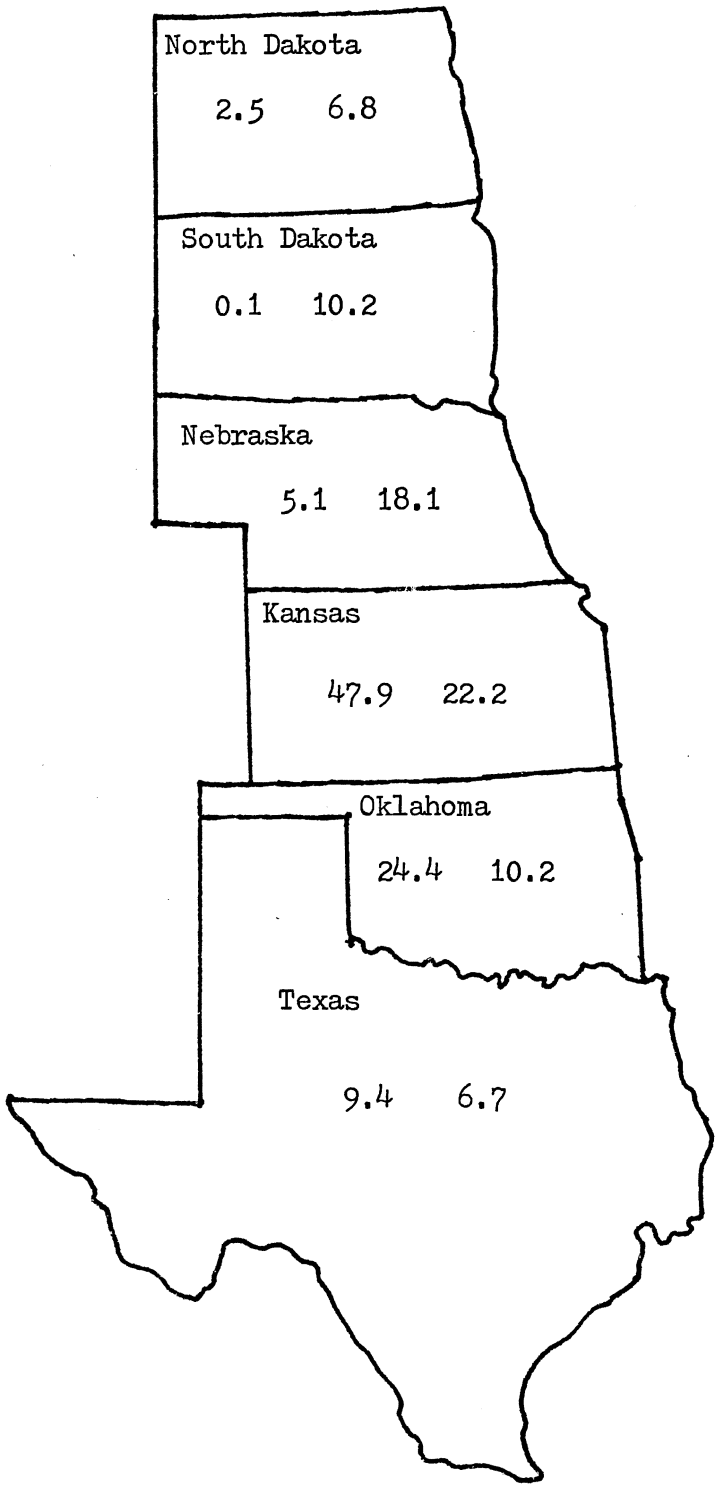
States Bureau of Agricultural Economics launched a study of custom combine outfits in Nebraska. Agents of the Nebraska Motor Fuels Division, who checked incoming custom cutters for the amount of gas they were bringing in, collected information for the study at seven ports of entry. Officials of the Nebraska Noxious Weed Control Division, traveling the state to prevent harvesters from inadvertently spreading weeds with their machines, interviewed a few more custom cutters. An unknown number of custom cutters in the state missed being interviewed: those who entered at a port of entry on the southern border not manned by the Motor Fuels Division, those who entered the state from the north, east, or west, and those who ran the ports of entry at night to avoid inspections all escaped detection, unless a roving weed inspector happened to catch up with them. Also, outfits that had originated in Nebraska, had gone south, and were returning home were not subject to inspections at the ports of entry. Weed inspectors gathered information on a few of these within the state, however.

The researchers managed to catch up with 447 custom combines (See Figure 1). They treated each combine and the machinery and men associated with it as a unit for the collection of data, for at that time hardly any custom cutters owned more than one machine anyway. Nearly half of the combines for which a place of origin was recorded came from Kansas, almost a fourth from Oklahoma, and nearly a tenth from Texas (See Figure 2). These figures indicated that the southern plains was the great cradle of custom cutters in the industry's first year of expansion. Few custom cutters yet came from the northern plains. Some Dakotans may have escaped the count by entering Nebraska for the harvest from the north, but these probably were few. If a northern custom



First number following name of port of entry is number of combines registered in 1942; second number is number registered in 1947.

Figure 1. Custom Combines Registered at Ports of Entry in Nebraska, 1942 and 1947



Number on left in each state is percentage of combines from the state in 1942; number on right is percentage of outfits from the state in 1947.

Figure 2. Principal States of Origin for Custom Combines (1942) and Custom Combine Outfits (1947) in Nebraska

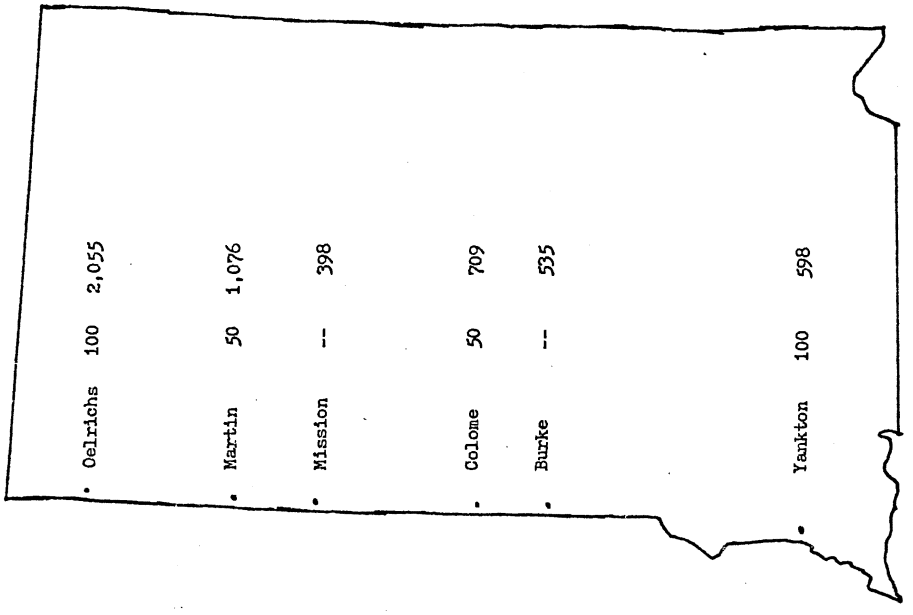
cutter meant to venture into the winter wheat region, he would go at least as far south as Kansas. Combines from the southern plains also tended to be larger models than those from other areas. Because the study did not cover all ports of entry, it offered little definite information on what areas of Nebraska custom cutters were most numerous in, but since state officials chose to monitor mostly western ports of entry, they must have expected the greatest numbers of combines there. As anticipated, the port of entry at Haigler, in the southwest corner of the state, registered more combines than any other port.[12]

A second survey of custom cutters in Nebraska done in 1947 showed that their business had flourished in the course of five years. This time representatives of the state extension service and officials of the ports of entry covered thirteen ports along the southern border of the state, but they still no doubt overlooked some outfits passing through other southern ports or entering from the north, east, or west. In this case outfits from Nebraska also were counted if they were coming home from another state. The researchers found 5,117 combines entering thirteen ports, as opposed to 515 counted at seven ports in 1942 (See Figure I). Some of the ports covered in 1942 were neglected in the study of 1947, and many manned in 1947 had been overlooked in 1942. Nevertheless it was plain that a great increase in traffic had occurred. Ports at which counts were made in both 1942 and 1947--Alma, McCook, and Lorenzo--registered tenfold and twentyfold increases in the number of combines entering. The wheat regions of the south-central and far western parts of the state attracted the greatest numbers of machines, but the 500 combines that entered at Dawson, in the southeastern corner of the state, showed that the movement was not confined to the high plains.

Information about the places of origin of custom cutters in Nebraska in 1947 showed that although combiners from the southern plains still were predominant, harvesters from the northern plains also were entering the field (See Figure 2). Unlike in 1942, in 1947 the researchers recorded place of origin by outfit, not by individual combine. More outfits still came from Kansas than from any other state, but Kansas's share of the total had shrunk to about one-fifth of a total of 2,969 outfits. Nebraskans rivaled Kansans as custom cutters in Nebraska. Canada and South Dakota each contributed more outfits than did Oklahoma, while North Dakota sent more than Texas.[13]

During about the same period of years, custom combining underwent a similar boom in South Dakota, where both winter and spring wheat were grown. In 1943 the supervisor of farm labor for South Dakota asked officials at the ports of entry on the southern border of the state to estimate the number of combines entering through their ports. The estimates from the six ports of entry totaled only 300. In 1947 all combines entering the state were required to stop and be registered at the ports of entry, and so an accurate count was made, except for those custom cutters who may have run the ports of entry. 6,371 combines were registered (See Figure 3). As in the case of Nebraska, the greatest numbers arrived through western ports of entry, especially Oelrichs, but even far to the east at Yankton hundreds came through.[14]

Similar returns from Kansas showed that although custom cutting was flourishing by the end of World War II, immediately after the war the business continued to expand. Officials at all the ports of entry on the southern border of the state made counts or close estimates of the numbers of combines entering the state each year from 1945 through



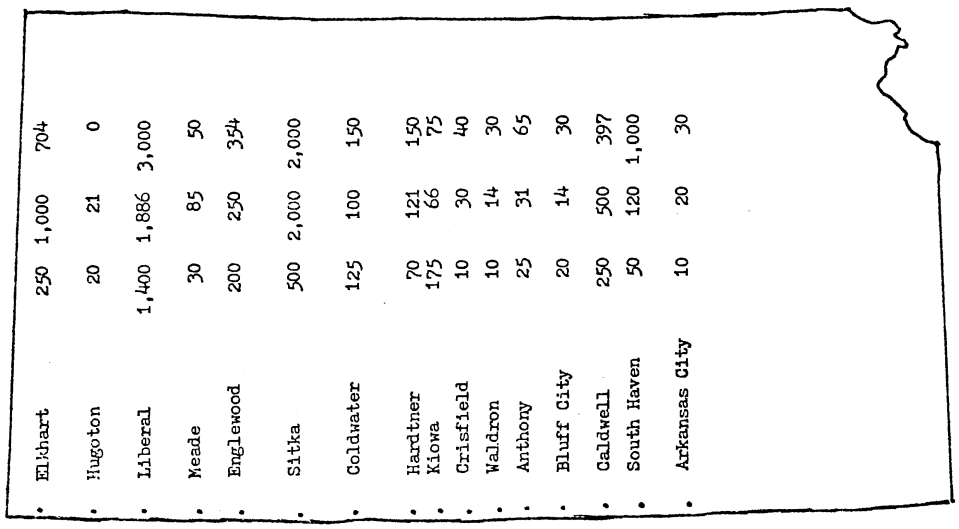
First number following name of port of entry is number of combines estimated in 1943; second number is number counted in 1947.

Figure 3. Custom Combines Estimated or Counted at Ports of Entry in South Dakota, 1943 and 1947

1947. In 1945 3,145 combines entered the state, they said; in 1946 the total nearly doubled, to 6,248; in 1947 continued expansion pushed the total to 8,048. In the case of Kansas there probably were many combines that entered from the north to begin custom harvesting. Also, combines that originated in Kansas, went south to harvest, and returned home were not counted at the ports of entry. In 1945, for instance, officials of the state extension service estimated that 525 combines went south from Kansas and returned and that 500 combines entered Kansas from the north to start their harvesting season, including 250 from Canada (See Figure 4).[15]

Each year from 1945 to 1947, the extension service had its county agents in most of the states of the Great Plains report the numbers of custom combines employed in their counties. Some agents reported only those custom outfits that they placed on jobs themselves, while others estimated the total number of custom combines at work in their counties. Many custom outfits, because they worked in several areas in one state, were counted repeatedly in the same state. Nevertheless, the totals compiled by the extension services from reports by their county agents gave rough testimony to the growth of custom cutting (See Table I). Each state showed increasing use of custom cutters through the three years. In Texas the increase was spectacular, more than 300%, making the farmers of Texas the greatest employers of custom cutters in 1947.[16]

The rapid expansion of custom combining in the mid-1940s was evident in individual experiences as well as in aggregate information. Perhaps the best known custom outfit of the early years of the business was that of Norman R. Hamm of Cheney, Kansas. He assembled a caravan



First number following name of port of entry is number of combines registered in 1945; second number is number registered in 1946; third number is number registered in 1947.

Figure 4. Custom Combines Registered (or Estimated) at Ports of Entry in Kansas, 1945-1947

of machinery and crew of men so impressive it generally was known as "Hammtown." Hamm started custom cutting with a small drag machine for his neighbors in 1940 and went on the road in 1942, the first year of the boom in the business. Rapid growth of the industry affected his outfit accordingly: by 1947 his harvesting caravan included eight trucks towing eight self-propelled Massey-Harris combines. On arriving at a new job, Hamm's men immediately unloaded the combines and cut an acre or two to accommodate a village of trailers--two sleepers, a cookshack, a service trailer, a shower, a recreation trailer, and a baggage trailer. From Texas to North Dakota, Hamm's outfit cut a wide swath--400 or 500 acres for each full day of cutting.[17]

TABLE I

CUSTOM COMBINES AND TRUCKS FROM OUT OF AREA AS REPORTED BY COUNTY EXTENSION AGENTS, 1945-1947

State	Combines			Trucks		
	1945	1946	1947	1945	1946	1947
Texas	2,895	5,097	9,138	1,815	1,312	5,537
Oklahoma	1,521	1,680	2,781	3,000	3,500	3,645
Kansas	5,779	5,236	7,800	4,790	3,256	5,084
Colorado			1,476			1,072
Nebraska	1,500	3,030	2,681	1,000	1,801	1,777
South Dakota	1,000	2,656	3,560	500	1,000	2,100
North Dakota	1,634	1,637	2,958	2,816	2,642	3,865

Expansion did not have to be on such a grand scale. John Stephenson of Coon Rapids, Iowa, ran a modest operation designed to supplement his income from farming. He owned a twelve-foot drag combine with pickup header to harvest his own 150 acres of small grain. In 1946, on finishing combining at home, he headed for Jamestown, North Dakota, to make a second harvest. He handled the combine himself, hired the neighbor's boys to drive his truck and tractor, and left the chores at home in the hands of his own teenage son. He repeated the venture in 1947. Although each year he harvested only a few hundred acres, Stephenson added one more machine to the ranks of interstate custom cutters.[18]

Many other custom harvesters also operated small outfits, but ranged over more territory than did Stephenson. Fred Brown had a wheat farm near Clinton, Oklahoma, and when custom combining began to boom, he saw an opportunity to supplement his income. In 1945 he and his seventeen-year-old son, Jim, took their drag machine on a short run northward. Then they invested their profits in a new Massey-Harris self-propelled combine. After finishing their own wheat in 1946 the two traveled to Dodge City and Oakley in Kansas and to Alliance in Nebraska, harvesting about 1,300 acres and heading home at the end of July with about $2,000 in net earnings. Such success meant another recruit to the army of custom cutters.[19]

On a similar scale was Ted Hardwick of Saxmon, Kansas. In his locale farms were relatively small, diversified operations, and Hardwick accordingly began custom cutting on a small scale. In 1942 he bought his first combine, a nine-foot drag Minneapolis Moline. He cut his own 200 acres of wheat with the little Minnie and then custom cut

for his neighbors for $3.00 an acre. The next year he traded for a seven-foot Massey-Harris Clipper combine, a model designed for the Midwest. He cut wheat for himself and his neighbors in the summer and custom cut 200 acres of milo in the fall, two rows at a time. In 1944 the methodical Hardwick bought a fourteen-foot drag John Deere combine, and finally, in 1947, as the boom in custom combining reached its peak, he invested in a self-propelled John Deere. Local small farmers scoffed at his $4,700 investment, but soon they were hiring him to open fields for them for twenty-five cents a bushel. Hardwick that year traveled to western Kansas to seek additional work--another convert to a growing profession.[20]

Some even abandoned defense work to become custom combiners. W. H. Ring, who grew up on a farm in Harper County, Kansas, left a job in Oklahoma City at the onset of World War II to work in an airplane assembly plant in Wichita. After only a few months he tired of indoor work. In the spring of 1942 Ring obtained a purchase certificate and bought a small drag Oliver combine in Newton for $1,410. Then he headed for Alva, Oklahoma, to begin harvesting. His travels that year carried him to Sedgwick and Dighton in Kansas, to Sutherland and Potter in Nebraska, and to Baker in Montana, finding work all the way. He sold his combine to a farmer in Montana and went home, but the next year he was back in the harvest with a drag Massey-Harris machine, starting in Mountain View, Oklahoma, and finishing in Wagner, South Dakota. Each year thereafter Ring made the harvest. He got his first self-propelled combines in 1945, leasing three Massey-Harris No. 21As.[21]

Implement dealers comprised another group that entered eagerly into custom combining, by sending machines from their own inventories

on the road, often under the management of a trusted employee. Paul Swanson of Devil's Lake, North Dakota, was one of these enterprising dealers. He first sent combines into the harvest in 1942, when the two Massey-Harris machines he dispatched started cutting at Enid, Oklahoma, and had paid for themselves before they had left Kansas. By 1947 Swanson was sending as many as seven combines into Oklahoma, sometimes netting profits as high as $5,000 per machine.[22]

Joe Vater was another custom cutting implement dealer. Diminutive, business-like Vater later was to become known as the foremost salesman of Allis-Chalmers Gleaner combines in the world. He acquired the Gleaner-Baldwin dealership in Enid in 1945. The same year he transported a Model E Gleaner combine to Syracuse, Kansas, to custom cut with Anthony O'Brate, an acquaintance from Syracuse. For years thereafter Vater took four Model Es to western Kansas and western Nebraska to work with O'Brate, and then he gave up the practice in order to devote more attention to his dealership.[23]

The great increase in custom combining in the years 1942 through 1947 was due mostly to the individual actions of entrepreneurs like Vater and the rest. In one notable case, however, custom cutting received a boost from the well organized, highly publicized efforts of an implement company. This was the case of the Massey-Harris Self-propelled Harvest Brigade of 1944.

In the fall of 1943, when the governments of the United States and Canada called on farmers for the greatest increases in wheat production, farmers wondered how they were to harvest the increased acreage. Production of farm machinery was at its lowest level because of quotas on materials, and farm labor was scarce because of inductions

into the armed forces and the attractions of defense work. Governmental officials shared in the concern of farmers. This gave Massey-Harris Company the chance not only to assist in an agricultural emergency, but also bring in a bin-full of favorable publicity.

The Massey-Harris Company, with its principal plant in Toronto, Ontario, and a subsidiary in Racine, Wisconsin, was the world's leading manufacturer of harvesting implements. In 1939 the company had released its No. 20 self-propelled combine, the first practical self-propelled combine, which was used by a few Canadian farmers in the harvest of 1940. The company then released an improved model, the No. 21, just in time to begin production before the Canadian government prohibited the introduction of new models for the duration of the war.[24]

Joseph Tucker, vice-president of sales in the company's subsidiary in Racine, earlier had served on the War Production Board of the United States. He had been the board's liaison with the War Production Board of Canada. To his colleagues in the company and his acquaintances in the government, Tucker proposed that the No. 21 combine be used to save the harvest of 1944. The plan he had in mind required the approval of both governments, and so Tucker went to Washington while other lobbyists for the company went to Ottawa.

They urged that the Massey-Harris plant in Toronto be granted an extra allocation, above its established quota, of enough steel and other materials to make 500 No. 21 combines. The company then was to place these machines in the hands of custom combiners in areas where they were needed in 1944. Tucker obtained support for the plan from Marvin Jones, administrator of the United States War Production Board, and Jones requested his Canadian counterparts to grant the company's

request. They did. While workers started the extra combines down the assembly line, officials of the company made plans for the coming harvest and announced the formation of the Massey-Harris Self-propelled Harvest Brigade.[25]

Their plan was to deliver the combines as they were available to four general areas of need. Some were to go to the west coast for the California Brigade, which would begin by harvesting flax in southern California and end up combining wheat in the central part of the state. Others would make up a Pacific Northwest Brigade for the wheat harvest there. Still more were to form a Southern Brigade in southern Texas, harvesting flax and oats and then swinging north and west into the wheat harvest, except for those machines that remained in Texas to harvest milo. The great majority of the combines were to go to Kansas and Oklahoma for a Central Plains Brigade, which would cut its way northward through the winter wheat and spring wheat regions.[26]

In February, 1944, representatives of Massey-Harris Company met with groups of experienced custom cutters in towns up and down the wheat belt--places like Hastings, Nebraska, Watertown, South Dakota, and Topeka, Kansas. The spokesmen explained that Massey-Harris would distribute 500 No. 21 combines with fourteen-foot headers through dealers across the plains. In order to join the Harvest Brigade, a custom cutter was to consult his local dealer, who would accompany him to the office of his county war board to obtain a purchase certificate for a combine. The custom cutter then was to pay cash for the machine, but he was to take delivery of it at the place where he planned to begin harvesting. For members of the Central Plains Brigade, this usually meant a place like Enid or Altus, Oklahoma, or Hutchinson,

Kansas. Each custom cutter was to declare his "unqualified intention" to cut 2,000 acres of grain for each machine and to forward records of his operations to the offices of Massey-Harris Company.[27]

Finding plenty of custom cutters eager to buy the 500 combines, the company went ahead with its plans and publicity. Brochures and news releases emphasized the patriotic contribution the Harvest Brigade would make, but also pointed out the virtues of the No. 21 combine. The No. 21, they claimed, would cut fifty acres in a day, as compared to forty acres for a drag machine of the same size. Each self-propelled combine used in place of a drag machine would release a tractor and a man for other work. A self-propelled combine would consume less fuel than would a tractor and a combine with auxiliary engine and would save grain that otherwise would be lost in opening fields. The company announced a goal for the Harvest Brigade of a million acres cut, based on an expectation of 2,000 acres for each of 500 combines.[28]

The Harvest Brigade, true to its name, took shape with mock-military organization. The head of Massey-Harris in Racine was the general of the Harvest Brigade. Each regional branch manager became a colonel, each territorial manager a major, and each local dealer a captain. Massey-Harris mechanics received the lowly rank of technical sergeant. Bulwarks of the Brigade, of course, were its lieutenants, the custom cutters. The company appropriated $8,000 for "decorations"--war bonds of from $100 to $500. Each custom cutter was to mail his receipts for harvesting to the company as he accumulated them, and at harvest's end, the custom cutters who had done the most work as measured by dollar receipts would receive the bonds as prizes.[29]

In April the first combines of the Harvest Brigade rolled off railroad flatcars in southern Texas, having completed their journey from Toronto, and churned into fields of ripe flax. Meanwhile hundreds of grain trucks from all over the plains converged on points of delivery for combines of the Central Plains Brigade. The custom cutters fired up their machines in time to join forces with the Southern Brigade. A clattering, crimson arc stretching from the Cross Timbers to the Rocky Mountains, these self-styled panzers of the prairies would pursue the harvest northward to the Canadian border and beyond.

Once in the field, the custom cutters benefited from efficient joint planning by Massey-Harris Company and the United States Agricultural Extension Service. County extension agents and Massey-Harris dealers labored to bring together custom cutters needing jobs and farmers needing harvesters. Often they set up temporary offices at grain elevators or implement dealerships and ranged into the countryside to inquire about farmers' needs. Ahead of the advancing brigade, in the company's airplanes, flew representatives who scouted out the ripeness of the wheat and the supply of combines. The company also sent truckloads of parts and delegations of servicemen into the field to answer calls for help, repairmen sometimes hastening to a point of trouble by airplane. Oil companies sent tank trucks of fuel into the fields. Officials of the Extension Service, Agricultural Adjustment Administration, and War Food Administration made sure that harvesters received sufficient supplies of gasoline and tires.[30]

Some difficulties arose with the effort. It became apparent that a few inexperienced harvesters had slipped into the ranks to bedevil the company's mechanics. Dealers in the southern plains complained of

difficulties in keeping operators from the northern plains, less knowledgeable about combines, in action. Nevertheless, early reports from the field were better than expected, and by the middle of summer spokesmen for Massey-Harris Company announced that they had increased the goal of the Harvest Brigade to a million and a half acres. This proved too optimistic. The progress of the harvesters deteriorated later in the year, due to attrition from the ranks and to the usual tendency for the harvest to slow down in the spring wheat region. The total number of acres cut was 1,019,500. The Harvest Brigade threshed better than 25,000,000 bushels of grain for more than 5,000 farmers. The champion combiner was Wilford Phelps of Chandler, Arizona, who cut 3,438 acres to win a $500 war bond. Massey-Harris Company was a bigger winner: it released a color motion picture entitled Wonder Harvest to extoll the glories of the Harvest Brigade and the No. 21 combine.[31]

The fanfare attendent to the Harvest Brigade only emphasized the more profound change in wheat harvesting that had occurred in the early 1940s. The men of the Harvest Brigade were the shock troops of a larger force. A new industry had been founded, and although few realized it at the time, it possessed the traits of mobility and flexibility necessary for success on the plains. Custom combining was an admirable adaptation, one long overdue, finally ushered into existence by the exigencies of war.

FOOTNOTES

[1]Claude R. Wickard, "Wheat Farming in Wartime," Vital Speeches of the Day, Vol. VIII, No. 15 (May 15, 1942), p. 474.

[2]"Wheat Bonanza," Business Week, No. 615 (June 14, 1941), pp. 70-71.

[3]"Homeless Wheat," Business Week, No. 660 (April 25, 1942), p. 81; Wickard, "Wheat Farming in Wartime," Vital Speeches of the Day, Vol. VIII, pp. 475-476.

[4]"Wheat Outlook," Agricultural Situation, Vol. XXVII, No. 7 (July, 1943), pp. 14-15.

[5]"West," Agricultural Situation, Vol. XXVII, No. 10 (October, 1943), pp. 18-19.

[6]"Rotary 'Shock Troops' to the Rescue," Rotarian, Vol. XLI, No. 4 (October, 1942), pp. 23-24; "We Did It Before," Country Gentleman, Vol. CXIII, No. 5 (May, 1943), pp. 20, 64; New York Times, July 16, 1944, sec. 4, p. 7.

[7]"Farm Equipment Available in 1944," Agricultural Situation, Vol. XXVIII, No. 2 (February, 1944), pp. 15-16; "Farm Machinery in Wartime," Agricultural Situation, Vol. XXIX, No. 6 (June, 1945), pp. 14-17; Walter W. Wilcox, The Farmer in the Second World War (Ames: Iowa State College Press, 1947), pp. 54-56; Bureau of the Census, United States Department of Commerce, Manufacture and Sale of Farm Equipment and Related Products, 1942 (Washington, D. C.: Government Printing Office, 1943), p. 3; Bureau of the Census, United States Department of Commerce, Production and Sales of Farm Machines and Equipment, 1944 (Washington, D. C.: Government Printing Office, 1945), Table 9.

[8]W. S. Johannsen, "The Great Migration," Implement and Tractor, Vol. LVIII, No. 31 (July 31, 1943), pp. 10-12, 23.

[9]Bureau of the Census, United States Department of Commerce, Production and Sales of Farm Machines and Equipment, 1944, Table 9.

[10]Personal interview, Levi A. Quig; "Combines Follow Harvest," Capper's Farmer, Vol. LV, No. 5, p. 23; personal interview, Joe Habiger.

[11]Personal interview, Everett Squires.

[12]Reuben W. Hecht, Transient Combine-Harvester-Threshers in the Great Plains, 1942 (Washington, D. C.: Bureau of Agricultural Economics, United States Department of Agriculture, 1942), copy in File No. 56078.591, Immigration and Naturalization Service, United States Department of Justice, Washington, D. C. Information in Figure 1 and Figure 2 from tables in above source and in E. H. Leker, Farm Labor Program for Wheat and Other Small Grain Harvest in the Great Plains States, 1943 to 1947 (Washington, D. C.: Agricultural Extension Service, United States Department of Agriculture, 1948).

[13]E. H. Leker, Farm Labor Program for Wheat and Other Small Grain Harvest in the Great Plains States, 1943 to 1947, pp. 23-25.

[14]Ibid., p. 25. Information in Figure 3 from tables in the same source.

[15]Ibid., p. 27. Information in Figure 4 from tables in the same source.

[16]Ibid., p. 26. Table I adapted from same source.

[17]Ibid., p. 28; Topeka Journal, May 18, 1948, clippings collections, Kansas State Historical Society Library; Arthur H. Carhart, "Hammtown--U. S. A.," Rotarian, Vol. LXXV, No. 1 (July, 1949), pp. 17-20.

[18]Agricultural Extension Service, United States Department of Agriculture, "Preliminary Survey of Major Areas Requiring Outside Agricultural Labor," Extension Farm Labor Circular No. 38, p. 123.

[19]Ibid., pp. 128-129.

[20]Personal interview, Ted Hardwick, Saxmon, Kansas, March 16, 1977.

[21]Personal interview, W. H. Ring, Sedgwick, Kansas, October 14, 1976.

[22]C. P. Streeter, "Here Come the Combines," Farm Journal, Vol. LXXI, No. 8 (August, 1947), p. 21.

[23]Personal interview, Joe Vater, Enid, Oklahoma, December 15, 1976.

[24]Tom Carroll, "Basic Requirements in the Design and Development of the Self-propelled Combine," Agricultural Engineering, Vol. XXIX, No. 3 (March, 1948), p. 101; Merrill Denison, Harvest Triumphant: The Story of Massey-Harris (New York: Dodd, Mead, and Company, 1949), pp. 308-309.

[25]Denison, Harvest Triumphant, pp. 314-315; "An Extra Million Acre Harvest," Farm Implement News, March 30, 1944, pp. 26-27; "Harvest Brigade," Time, Vol. XLIV, No. 5 (July 31, 1944), p. 79; Massey-Harris Company, Massey-Harris Self-propelled Harvest Brigade (Toronto, promotional booklet, no date), library of Massey-Ferguson Company, Limited, Toronto, Ontario.

[26]"Massey-Harris Forms Self-propelled Combine Brigade to Harvest 1944 Crops," Implement Record, April, 1944, clippings collections, John Deere Company Archives, Moline, Illinois; Massey-Harris Company, Massey-Harris Self-propelled Harvest Brigade.

[27]Massey-Harris Company, The American Press Salutes the Harvest Brigade (Toronto, promotional brochure, no date), library of Massey-Ferguson Company, Limited; Massey-Harris Company, Massey-Harris Self-propelled Harvest Brigade; "Harvesting Race: Massey-Harris Spots Its Self-propelled Combines in Areas of Acute Machine Shortage, Offers Prizes for Best Performance," Business Week, No. 764 (April 22, 1944), p. 26; personal interview, Henry Oldham, Blackwell, Oklahoma, December 15, 1976.

[28]Massey-Harris Company, Massey-Harris Self-propelled Harvest Brigade.

[29]Ibid.

[30]Ibid.; Denison, Harvest Triumphant, p. 316; personal interview, Henry Oldham; "Flying Harvest Hand," Business Week, No. 775 (July 8, 1944), p. 48.

[31]Denison, Harvest Triumphant, pp. 316-317; Massey-Harris Company, The American Press Salutes the Harvest Brigade; personal interview, Henry Oldham; Joe Tucker, "The Self-propelled Combine," Agricultural Engineering, Vol. XXV, No. 9 (September, 1944), pp. 334-335.

CHAPTER III

HARD TIMES AND CONTINUED DEVELOPMENT, 1948-1977

Even as the boom in custom combining took place during World War II, many observers predicted that it was only a passing phenomenon, and that once the emergency had ended, farmers would resume harvesting their own grain. For manufacturers of farm implements, this was wishful thinking. If custom cutters harvested much of the grain, making each combine cover more acres, then fewer combines would be purchased. Officials of Massey-Harris Company, architects of the self-propelled combine and the Harvest Brigade, were in an uncomfortable position in relation to their fellows in the business. The self-propelled combine was well suited to custom combining because of its speed of operation, ease of transport, and economy of labor. Conservative farmers, on the other hand, disliked the innovation because it replicated machinery. A farmer had to own a tractor anyway, they said, and so he might as well use it to draw a combine. Massey-Harris seemed to be promoting its new self-propelled combines at the expense of the eventual welfare of the implement industry. Joe Tucker acknowledged that his Harvest Brigade might have opened a Pandora's box for the implement makers, but he reassured them, "I don't believe there is much to fear of custom combining becoming very popular under normal economic conditions."[1]

Some farmers agreed. "Sure we hired our wheat custom cut during the war," said one from the Oklahoma Panhandle, "but as soon as we could get a new combine after the war we got it and hope to cut all of our own wheat from now on."[2] Many were puzzled when during the first couple of years after the war custom cutting failed to die out as it was supposed to. This they attributed to the continued shortage of machinery.

Most machinery manufacturers, wheat farmers, and governmental officials still considered custom combining an annual phenomenon. They assumed that each spring custom cutters surveyed the agricultural situation for the coming year--the acreage planted, the yield expected, and the ability of farmers to pay for harvesting--and then responded to the need for custom combines, if any. They failed to realize that a new class of men had been created, professional custom cutters, to whom harvesting had become as much a way of life as farming was to their customers. These men were emotionally attached to their occupation, and they had capital invested in it. They would enter the harvest even if prospects were dismal, just as farmers would plant their wheat even if the price was poor. Although the late 1940s were hard times for custom cutters, their business survived to become an established agricultural institution on the plains. Seeded as an annual to meet an emergency, custom cutting evolved into a perenniel.

Hard times for custom cutters began in 1948. The cause of their troubles was a sudden break in the price of wheat, as the postwar, international shortage of wheat ended. The miraculous expansion of grain production earlier hailed as a patriotic effort eventually brought price-depressing surpluses. From the Agriculture Act of 1948 through

the Agriculture Act of 1977, the United States government implemented a variety of policies to deal with the problem of chronic overproduction of wheat. The significance of the policies for custom cutters was that all were designed to limit marketings or acreage of wheat. With prices low and production restricted, farmers planted less wheat and had less need for custom cutters than they would have otherwise. Farmers also were less willing to employ custom cutters when the price of wheat was low, preferring instead to make do with what machinery they had or to trade work with neighbors.

Compounding the problem in 1948 were hundreds of custom combining novices who made the harvest for the first time, attracted by tales of profits in previous years. In 1948 and for years afterward the State Employment Service of Nebraska registered custom cutters entering the state at five principal ports of entry, recording information on an estimated 70% or 75% of the combiners coming in. Whereas the state extension service, in a blanket of thirteen ports of entry, had registered 5,117 combines in 1947, the state employment service counted 4,866 at just the five ports of entry it covered in 1948 (See Table II).[3]

Custom cutters who had developed a regular clientele of farmers they served year after year survived the season in good shape, but newcomers to the business met with disaster. The supply of combines in 1948 exceeded demand up and down the plains. Combines stood silent in the streets and alleys of small towns, representing not only unproductive capital, but also idle workers who kept right on eating whether they worked or not. The carefree days when a few good old boys could form a custom outfit and make enough money in the summer to last them for the rest of the year were over.

TABLE II

CUSTOM CUTTERS ENTERING NEBRASKA FROM OUT OF STATE, AS REPORTED BY THE NEBRASKA STATE EMPLOYMENT SERVICE, 1948-1960

Year	Outfits	Machines	Men
1948		4,866	
1949		[more than 4,000]	
1950		2,664	
1951		1,251	
1952	1,985	2,860	
1953	2,696	4,176	7,682
1954	2,482	3,960	7,416
1955	1,913	2,969	5,838
1956	2,347	3,833	7,025
1957		3,773	
1958		6,868	
1959		5,031	
1960		6,296	

As the harvest moved across the southern plains, the weather temporarily disguised the surplus of combines. Although machines stood idle in many communities, in other isolated areas there were brief shortages. This was because the wheat matured early in northern Kansas and southern Nebraska, and combines flowed to those areas, leaving uncut wheat behind. The oversupply became apparent in Nebraska

in the middle of July. Nebraska was and is liable to chronic surpluses of combines because the wheat belt narrows in the northern part of the state, funneling custom cutters into a small area with not enough work for all. Custom cutters made camp to wait for wheat to be ready farther north, but conditions there got no better. During harvest the North Dakota State Employment Service announced a standing surplus of 500 combines, about a third the number of machines that entered from out of state. The employment service also reported more intrastate custom combiners working in the state than interstate ones, indicating that farmers were hiring neighbors with combines to cut their wheat rather than cutters from outside the state. In previous years many custom cutters had sold their machines to farmers in North Dakota at the end of the year at inflated prices, and they expected to do the same in 1948. This time few farmers bought. Custom cutters who had made the long trip from Oklahoma or Kansas were hard pressed to scrape up enough money to get home. In pawn shops and on the streets they peddled tools and tires for cash to buy gas.[4]

The poor conditions continued in 1949, for the number of custom combines still did not decrease enough to match demand. By the records, 5,449 combines were cleared through ports of entry along the southern border of Kansas; officials of the state employment service there estimated that between 6,000 and 7,000 went north from the state; inspectors at five ports of entry on the southern border of Nebraska counted more than 4,000 machines through their stations. Again the surplus of combines was particularly severe in Nebraska, but improved little farther north. Although the number of combines venturing as far as North Dakota declined slightly, there still were several hundred

more than needed (See Table III). The harvest had no more than begun in neighboring Montana before a surplus of anxious custom cutters was reported there, also.[5]

TABLE III

CUSTOM COMBINES ENTERING NORTH DAKOTA FROM OUT OF STATE, AS REPORTED BY THE NORTH DAKOTA STATE EMPLOYMENT SERVICE, 1948-1951

Year	Combines
1948	1,215
1949	1,082
1950	957
1951	486

Two years of depressed conditions brought adjustments for the industry. The price of wheat remained low, and so farmers were unwilling to hire harvesters. During the flush years many farmers had bought their own machines, enabling them to spurn custom cutters' services. Rather than complete outfits, farmers demanded skilled seasonal workers to drive their machines, especially in the spring wheat region. Discouraged by the economic situation and by unusually heavy rains, fewer custom cutters made the harvest in 1950 and 1951 than in years previous. Reports from Nebraska indicated fewer custom combines entering the state in 1950 and still fewer in 1951. North Dakota also

had less custom cutters in 1950, and only about half that year's total in 1951. Custom combining had reached its lowest ebb, but from a broader point of view, the business had made the necessary adjustment to a reduced demand. Custom cutting was a more flexible institution than wheat farming, on which it was based. Although custom cutters reacted to a depressed market only slowly, causing hard times temporarily, within a few years the ranks thinned. The hard core of professionals stayed in the business, acquiring further emotional attachments and additional debts to prevent them from leaving even if they wanted to, but marginal operators dropped out.[6]

Starting in 1952 a new period of growth in the business began. There were no quick profits in custom cutting in the 1950s, but neither were there any in wheat farming. As the market for wheat bottomed out, it was apparent that the surplus of grain was chronic and not temporary. Yet for wheat farmers on the plains, there was little alternative to raising wheat, since their land was poorly adapted for anything else. Lacking the flexibility of cropping that farmers enjoyed in regions of greater diversification, some wheat farmers on the plains turned to custom combining as an adjunct to their grain farming, just as other farmers might expand their livestock feeding or take part-time jobs in town. Nearly all custom cutters were part-time farmers, part-time harvesters.

The harvest of 1952 showed that although many custom harvesters had left the business during hard times, they were quick to return when conditions merited it. Acreage had expanded only slightly over the previous year, but yields were much higher, slowing the progress of the harvest and requiring more combines. The weather was hot and dry on

the central plains. All the wheat seemed to ripen at once. To everyone's surprise, a shortage of combines developed in Kansas. The state employment service, caught flat-footed, issued appeals for harvesters to load up their machines and come to Kansas. More important, farmers with cash in hand waited for custom cutters in every town. Combines flowed in rapidly from surrounding states to bring in the crop. As the harvesting minutemen who had come to Kansas's relief moved on north, they caused a surplus of machines in Nebraska, but most were sensible enough to go home from there rather than try their luck in the spring wheat region. Demand for custom combines was light in North Dakota, as in previous years.[7]

Apparently the flurry of activity in Kansas in 1952 encouraged many marginal custom cutters to make the harvest in 1953. There were plenty of combines in the area in which they had been in short supply the previous year, and in Nebraska, as more combines poured in to harvest a smaller crop, there was a large surplus. Once again most of the extra combiners turned around and went home from Nebraska, and so only about the number needed came to North Dakota. Likewise in 1954 there were too many combines in parts of the central plains, this time because drought decreased the amount of wheat to harvest. A reduction in the numbers of combines on the road in 1955 and 1956 finally brought supply in accordance with demand again.[8]

The cycle of expansion and contraction then repeated itself. Once again in 1957 temporary forces drew additional custom cutters into the harvest. The harvest in Oklahoma was delayed, first because heavy rains on good wheat caused lodging, and then because continued rains made fields muddy. Many custom cutters pulled out of the state in

order to meet commitments farther north. Hot weather then dried out the fields of Oklahoma and ripened the wheat in Kansas and Nebraska all at the same time. While combines were spread thin across Kansas, farmers in Oklahoma cried for machines to return. With an early harvest, even Nebraska had shortages of combines. By the time custom cutters moved into Nebraska, the rains started again, holding combines there until the harvest farther north was in full swing and short on combines. Because of the foul weather, less than one-third as many custom cutters got to Montana as in the previous year.[9]

The apparent shortages of combines in 1957 really were only dislocations, but they attracted additional custom cutters into the harvest of 1958. Fortunately, a record crop of winter wheat put the newcomers to profitable use, even in Nebraska. However, in 1959 considerable areage was abandoned due to drought in the spring. The traditionally tight market in Nebraska was worse than ever, as custom cutters who had found little enough work to the south found none at all there. In scenes reminiscent of the late 1940s, busted custom cutters sold equipment to buy gas. The next year Oklahoma had a good crop that gave custom cutters brief prosperity, but the usual surplus materialized in Nebraska.[10]

The story of custom combining through the 1950s was one of cyclical adjustment. Custom cutters responded rapidly to increased needs for their services, but only reluctantly to decreased demands, causing themselves occasional grief. Two classes of custom cutters evolved: professional custom cutters and marginal operators. Professionals generally still were part-time farmers, but they at least made custom harvesting a regular feature of their annual routine. They cultivated

an itinerary of customers for whom they harvested each year. Thus although poor markets and bad weather might reduce their business, they always had some wheat to cut. Marginal custom cutters were opportunists. When shortages of combines developed, they were ready to load up their machines and answer the call, especially if they had payments on their combines to meet. Often they gambled by making the harvest in years in which there was no special demand for their services, and usually they suffered for such audacity. The establishment of the business of custom combining added to the flexibility of agriculture on the plains in two ways: it enabled some farmers to obtain additional machinery and help in good years without investing heavily in equipment not always needed, and it gave other farmers with limited opportunities for diversification or expansion a pursuit they could follow as a supplement to farming.

During the 1960s greater stability came to the business of custom cutting. The numbers of machines and men involved climbed to a higher plateau, noticable in 1959 and 1960. This was not due to any return of prosperity to wheat farmers, but more likely to the gradual effects of environment and the economy. More farmers came to regard custom combining as part of the natural order of affairs, rather than as a stopgap measure. The economies attendent to hiring custom cutters instead of owning combines were obvious, especially in the western reaches of the plains, where suitcase farmers and speculative resident farmers were happy to have the problem of harvesting lifted from their shoulders. Accordingly the center of custom cutting gradually shifted to the west. This was evident in Nebraska, a state through which most custom cutters passed if they went north from Kansas and Colorado. A

greater proportion of them came to Nebraska through western ports of entry. Farther north, more custom cutters chose to go to Montana rather than North Dakota late in the season. Custom cutters also modified their routes in other ways. Wary of the surpluses of combines that always seemed to develop in Nebraska, harvesters either rolled through to jobs in South Dakota or else turned around after their last stop in Kansas or Colorado.

During the 1960s governmental officials compiled few records about the activities of custom combiners. This was not because custom cutting was dying out, but because it was becoming such an established institution that it no longer occasioned comment. By this time a new generation of custom cutters had grown up with the harvest. In the Squires family, of Taloga, Oklahoma, for instance, Everett's four sons worked in the harvest during the 1950s and 1960s, making up the third generation of custom cutting Squires. One of them, Richard, eventually would take over the business; Richard's two sons and daughter, then children growing up with the harvest, would compose a fourth generation of custom cutters.

No new outfits comparable to the Hammtowns of the early days were established during the 1950s and 1960s. Beginnings generally were humble and occasionally were simply matters of chance. In 1959 Russell Snell was wheat farming near Cherokee, Oklahoma, and had a new fourteen-foot Gleaner A combine which had cost him a little less than $5,000. A neighbor experienced in custom cutting urged Snell to make the harvest with him, and Snell agreed in order to get fuller use from his new machine. They harvested at home and for neighbors before pushing north to Dodge City and Smith Center in western Kansas and then into

western Nebraska. Having a good first year and liking the business, Snell continued in it until it was more important to him than his farming. When his friend left the business in 1962 he bought a second combine, and in 1967 or 1968, a third.[11]

Another case was Jack Schlessiger from near Claflin, Kansas. From a farming family, he started casually in the business of custom cutting when his cousin in Hydrox, Oklahoma, sold him a combine in 1963. From there he custom cut his way home. He continued harvesting a short route on the southern plains with two combines for the next few years, but did not "get serious" about the business, he said, until 1966. Then he advertised for jobs and traveled around in the spring to arrange for work. Each year thereafter he took two or three machines from southern Oklahoma at least as far as western Nebraska and sometimes into the Dakotas or Montana. To Schlessiger, however, custom cutting remained a lesser activity related to a general farming operation with his father. Custom cutting made it possible for the Schlessigers to own better harvesting equipment than they could have otherwise, and profits from harvesting helped to stake purchases of additional land.[12]

Harvesters like Snell and Schlessiger were rewarded for their perseverance in the business in the mid-1970s. From 1973 to 1976 bumper crops coupled with high prices created a doubly advantageous situation for wheat farmers, and incidentally also for custom cutters. High yields and expanded acreage, as farmers planted fencerow to fencerow, meant more work for harvesters and higher rates for doing it. Because farmers had ready cash, the price for harvesting rose for the first time since World War II, from about three dollars an acre to

about eight dollars an acre in 1976, with corresponding increases in charges for hauling and heavy yields. During the same time the price of a new combine of the size used in the wheat belt also went up rapidly, from around $15,000 to about $40,000. Custom cutters were able to pass on this increased cost to their customers. The rise in the price of machinery, combined with the flush times, helped to solidify the ranks of professional custom cutters. High price tags on new combines tended to discourage the sort of marginal operators who had entered the business during previous decades and also helped to ensure that few farmers would purchase combines unless they already were accustomed to doing so. Most of the expansion in custom combining that took place in the 1970s consisted of established operators increasing the size and quality of their outfits. Only a few new operators entered the field. Thus the new boom in custom cutting differed somewhat from earlier periods of prosperity.

Custom cutting seemed like the greatest of occupations for a few years, but in the spring of 1977, custom harvesters were worried and financially embarrassed. The previous year cocky combiners had delighted in displaying their new combines, trucks, and trailers; in 1977 they crossed streets to avoid meeting their bankers. Flush times had not brought too much expansion in numbers of operators, as in earlier times, but had encouraged an excess of borrowing for machinery. When the price of wheat fell in the middle of 1976, custom cutters with heavy debts were as uncomfortable as were farmers with their wheat still in storage. Custom cutters feared that in 1977 farmers would balk at hiring harvesters to bring in grain that paid less than the cost of production. Instead they might use the wheat for pasture

or silage or else try to manage the harvest with what combines were available in the neighborhood. Drought threatened to take additional acres out of the harvest.

As the harvest unfolded, it proved not to be the fiasco feared. Along the Red River in Texas and Oklahoma, there was some cutting of prices, as farmers rebelled at paying $8.00 rates to cut $2.00 wheat. However, this was an area where in previous years rates often had averaged lower than in other areas. As the harvest progressed through the southern plains, the rate for combining generally hung about where it had in 1976. Custom cutters with longstanding relationships with farmers found them sympathetic to pleas that increased expenses made lower rates impossible, although the farmers had no such ability to pass costs on to consumers. The weather also confused the situation, creating dislocations that helped to bolster the rate for cutting in certain areas. Heavy rains in Texas and Oklahoma bogged down many custom outfits, and the same thing happened in southern Kansas some weeks later.

Custom cutters of the 1970s were better able to weather hard times because they were less dependent on small grains than were earlier operators. Custom cutters in the early years of the industry had only two choices if they wanted to extend their season into the fall: they could continue the spring wheat harvest through the northern parts of North Dakota and Montana into western Canada, or they could seek jobs cutting milo, usually near home. Harvesting milo required only slight changes in equipment--the adjustment of the screens and cylinder and the addition of a pickup reel with wire fingers to lift broken stalks. In parts of Texas, Oklahoma, Kansas, and

Nebraska the milo harvest furnished profitable employment, but because harvesting milo was not the urgent sort of work that harvesting wheat was, it was hard for custom cutters to arrange many jobs for the fall.

Technological developments brought new productivity to the fall harvest for custom cutters. One was the development of corn headers that converted grain combines into corn combines. State experiment stations and several implement companies developed these corn headers on a practical basis in the early 1950s. Custom cutters thereafter could use their machines for corn as well as milo in the fall. The only problem was that the spacing of corn rows, while perhaps uniform in any single locality, was not standardized across the country or even across any large region. Because corn headers were designed for particular row spacings, they could not be used just anywhere, and so many custom cutters stayed out of corn harvesting.[13]

The rapid expansion of ground water irrigation on the plains in the 1960s created a whole new market for fall harvesters. Irrigation brought the production of corn onto the high plains, the heart of custom cutting country. Custom cutters at first might have watched with dismay as regular customers replaced acreage in dryland wheat with fields of irrigated corn and milo, thinking that work would be lost, but they found that many farmers were willing to hire them for fall harvest. More custom cutters began to handle corn, especially as implement makers put out corn headers with adjustable spacing.

In addition certain miscellaneous crops provided opportunities for a few harvesters. By adding special pans to the headers in order to prevent losses from shattering, custom cutters could equip their machines to harvest sunflowers. A few dozen custom cutters annually

crossed the Rockies into the San Luis Valley to harvest irrigated brewing barley. Occasionally such jobs as threshing grass seed or alfalfa seed furnished profitable work.

Fall harvesting was one way that custom combining, rather than withering away as expected in the early years, adapted to become a perennial part of the agricultural economy of the plains. Records retained by several state governments revealed much of the character and extent of the modern business of custom combining. In the late 1960s the Bureau of Plant Industry of the Nebraska State Department of Agriculture recorded information about custom outfits entering the state from the south. The bureau's personnel collected the information in connection with inspections of incoming combines for noxious weeds.[14]

The records showed that custom combining remained a flourishing business. In 1969 the bureau registered 1,897 custom outfits bringing in 4,250 combines. This was only about two-thirds the number of machines recorded by the State Department of Labor for several years about a decade earlier, but the earlier registration program apparently was more complete than the later one. Also, considering the increase in size and efficiency of combines, the smaller number of machines registered in 1969 would have had the capacity to harvest more grain than the larger number a decade earlier. The earlier trend for custom cutting to find its home on the high plains had continued. Most of the outfits entered the state in the southwest, particularly at the ports of entry at Benkelman and McCook (See Figure 5). Custom outfits came to Nebraska from roughly the same parts of the country as in years earlier (See Figure 6). Oklahoma and Kansas sent the largest

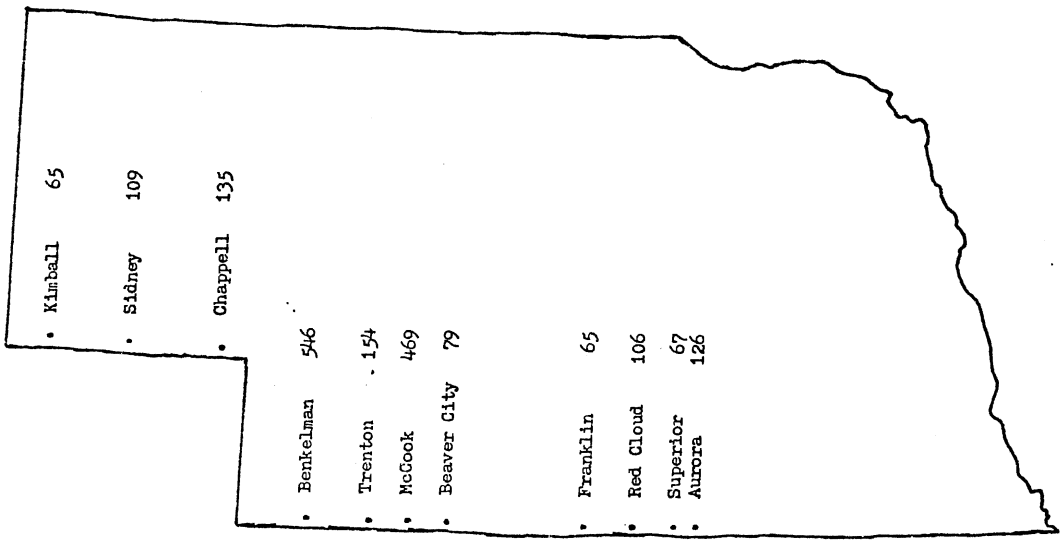
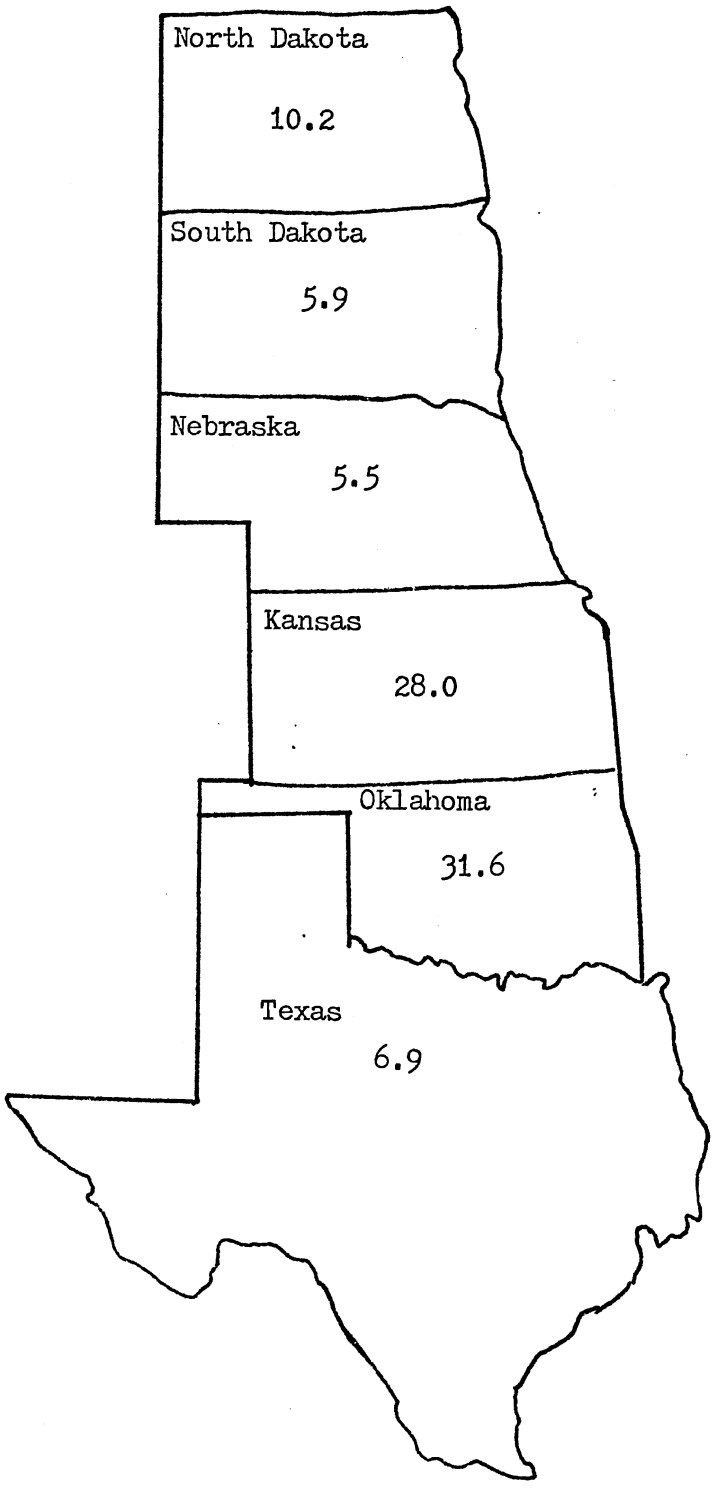


Figure 5. Number of Custom Combine Outfits Registered at Ports of Entry in Nebraska, 1969



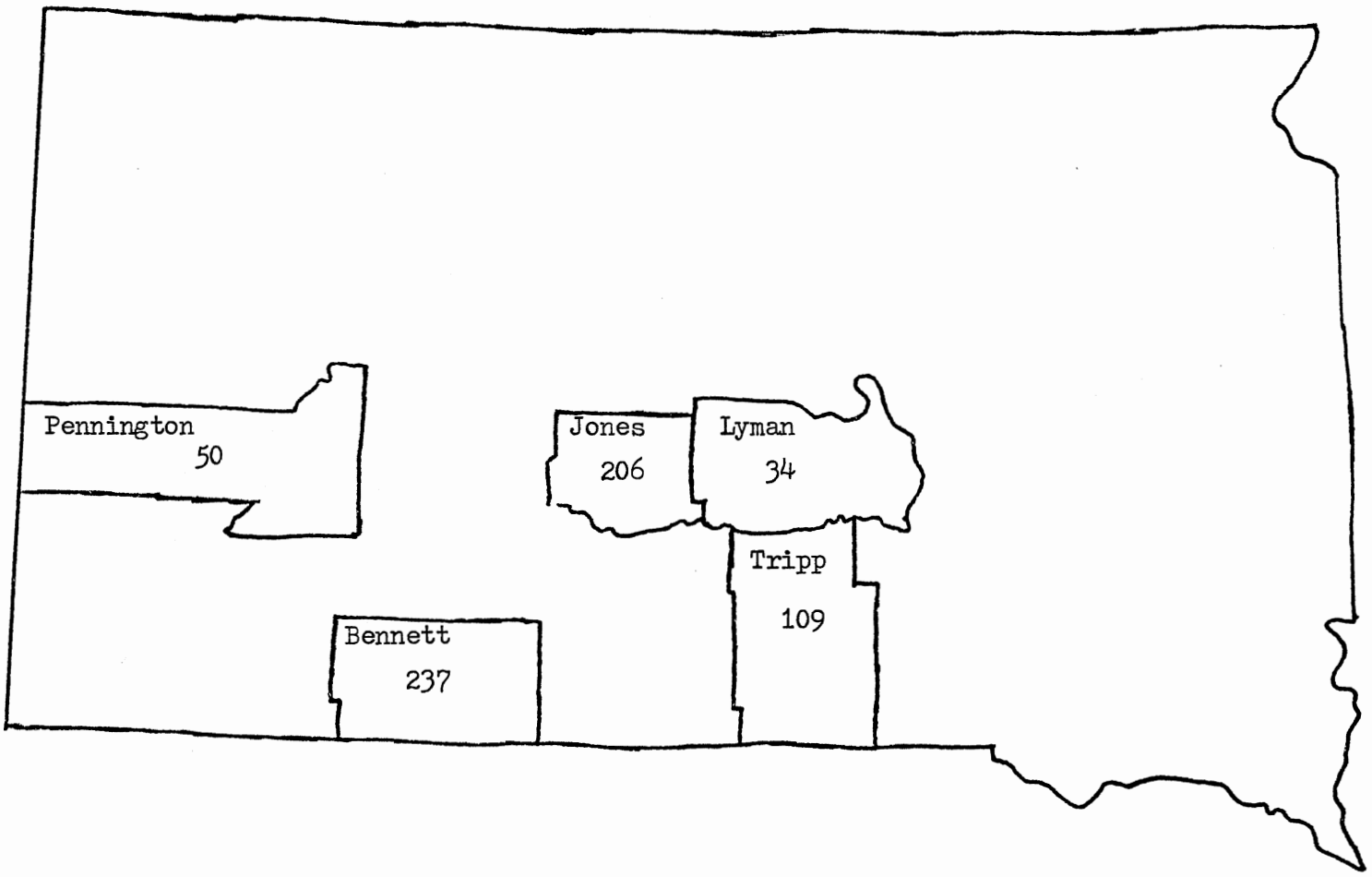
Number in each state is percentage of outfits from the state.

Figure 6. Principal States of Origin for Custom Combine Outfits in Nebraska, 1969

delegations and along with Texas established the southern and central plains as the principal place of origin of custom cutters. North Dakota sent a sizeable group from the spring wheat region.

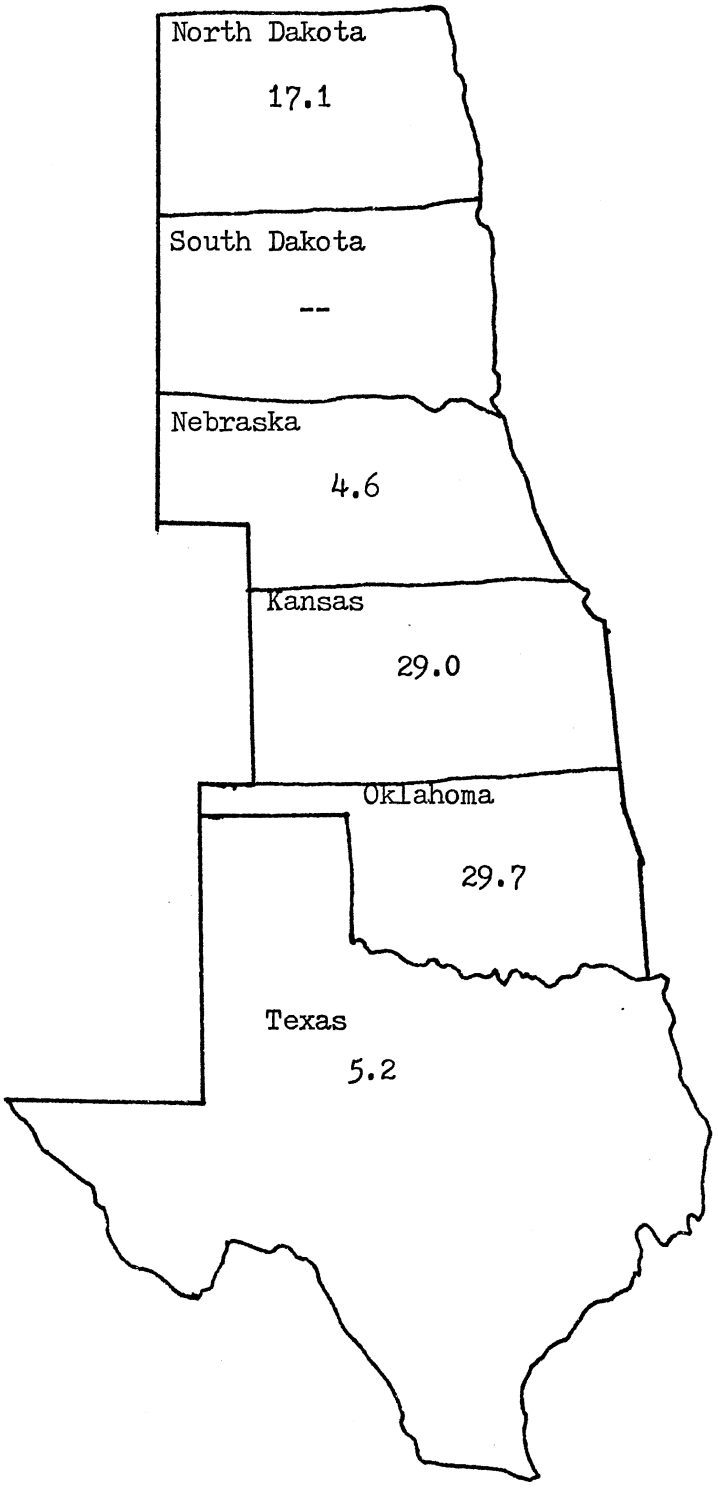
In 1976 the South Dakota Department of Public Safety also assembled a body of information about custom harvesters, as that year for the first time the department issued special harvester's permits to custom cutters working in the state. The permits were available to custom cutters in each county seat. Probably few custom cutters escaped the count, but there were fewer harvesters in the state than would have been the case had it not been for severe drought in the west. No doubt many outfits rolled right through the state to North Dakota or Montana without buying permits. 438 outfits were registered, using 815 trucks. Combines were not recorded on the permits. The custom outfits concentrated in the central and western counties of the state (See Figure 7). They came from much the same states of origin as those in Nebraska, except that the states of the southern plains were relatively less important, North Dakota and Minnesota more so (See Figure 8). Far fewer custom combines were operating in the state in 1976 than in the mid-1940s, but the drought largely explained the small number.[15]

The Montana Department of Highways used a similar system of permits in 1976. 624 outfits registered and brought 1,306 combines into the state, although drought also was prevalent in Montana. The custom cutters in the state came from the same general areas as those in the other states, except for relatively larger numbers from Oklahoma and Texas (See Figure 9).[16] About the same number of custom cutters and machines worked in North Dakota in 1976 as in Montana. The North Dakota



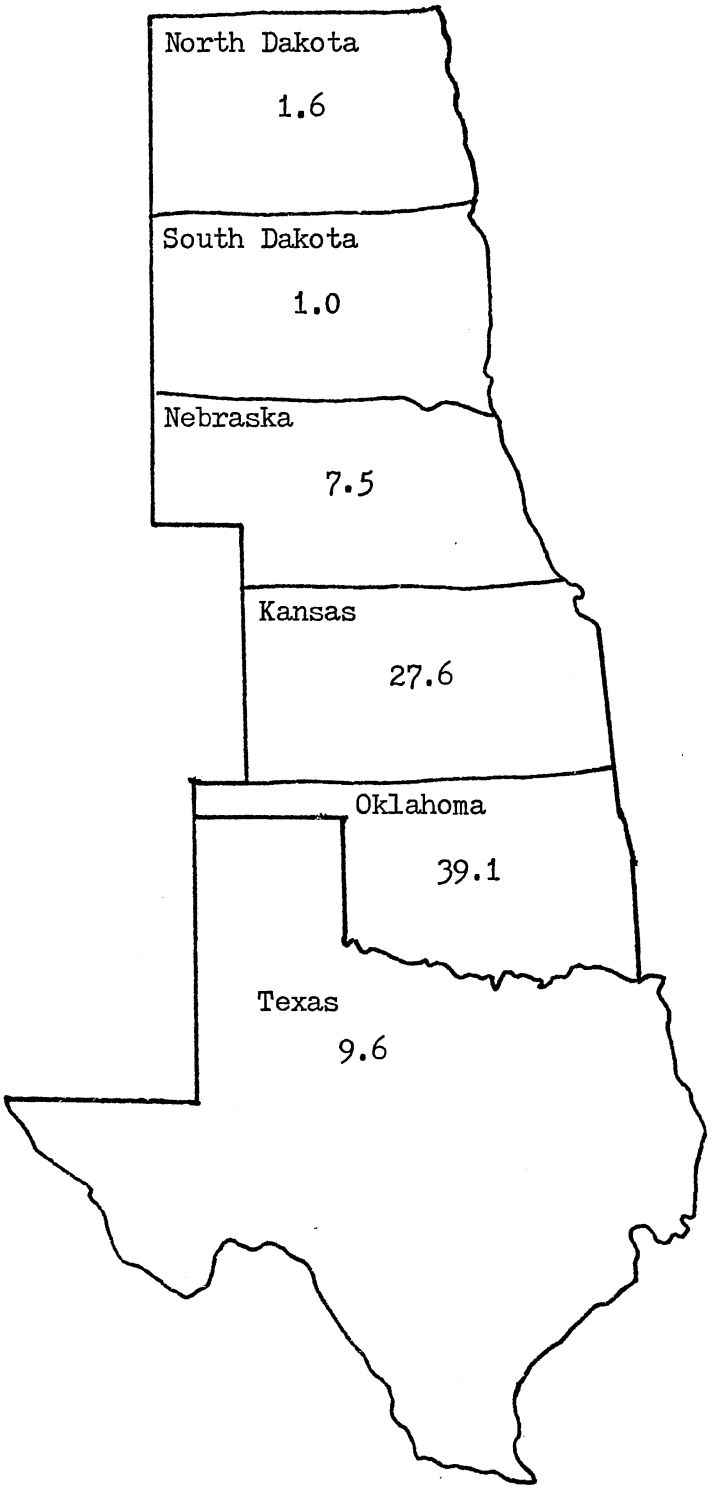
Numbers printed in counties are numbers of trucks registered.

Figure 7. Principal Counties of Registration for Custom Combine Outfits in South Dakota, 1976



Number in each state is percentage of outfits from the state.

Figure 8. Principal States of Origin for Custom Combine Outfits in South Dakota, 1976

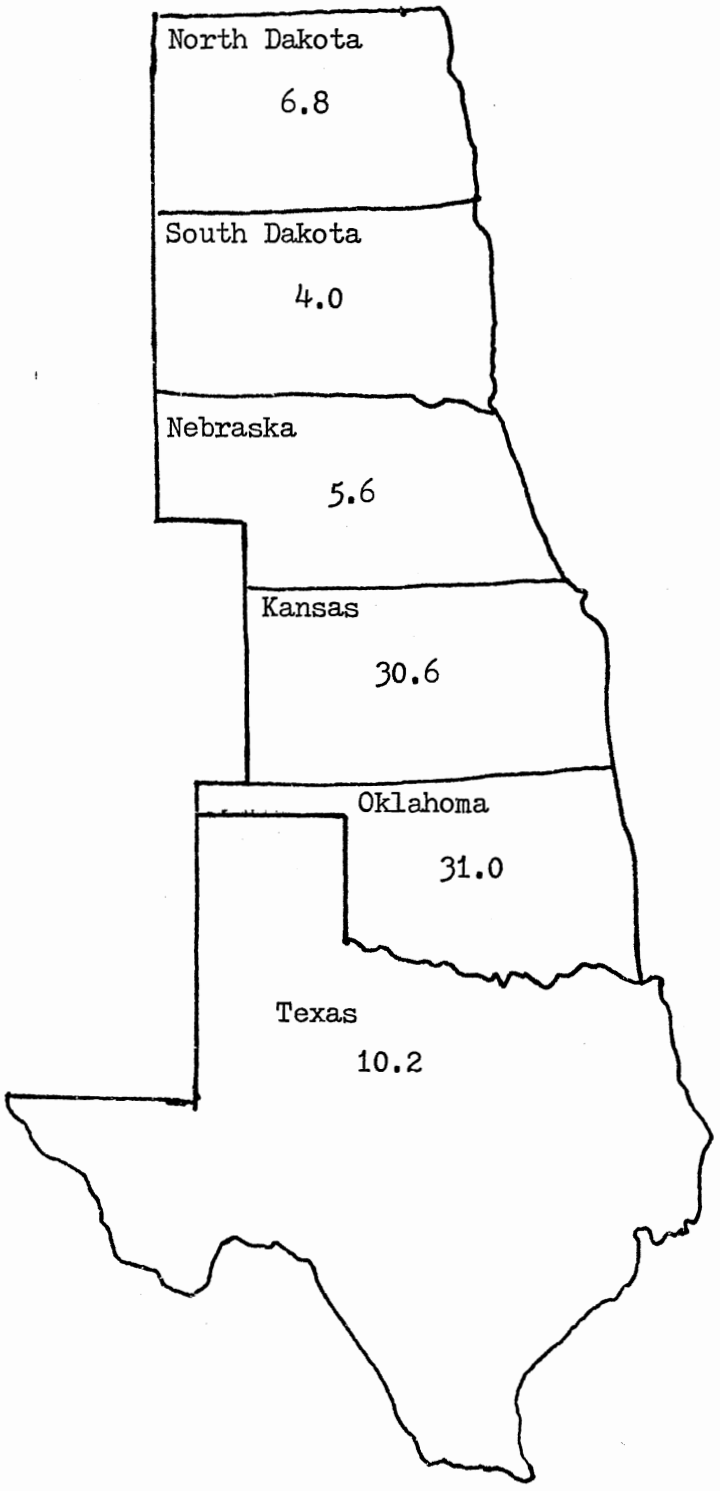


Number in each state is percentage of outfits from the state.

Figure 9. Principal States of Origin for Custom Combine Outfits in Montana, 1976

Highway Department, although it did not retain separate records on custom harvesters, reported that it issued permits for 1,524 custom harvester's trucks in 1976, as compared to 1,377 in 1975.[17]

The Economic Research Service of the United States Department of Agriculture, in cooperation with authorities in the nine principal states in which custom cutters operated, conducted the only comprehensive survey of the business of custom combining in 1971.[18] This was prior to the sudden advent of prosperity for custom cutters in the 1970s. The authors of the study did not reveal how many custom cutters were named on their master list compiled from lists submitted from the nine states, but the number of respondents to their survey was 3,431. These custom cutters carried with them on the harvest of 1971 7,557 combines, 7,946 grain trucks, and 3,089 mobile housing vehicles. They harvested 14.1 million acres of crops, including 10.9 million acres of wheat, 32.4% of the acreage in wheat in the nine states covered. Also included were 1.3 million acres of grain sorghum, 173,000 acres of soybeans, and 732,000 acres of other crops, corn among these but not specified. Although custom cutters came from as far away as both coasts--from California and Florida--most came from the traditional places of origin of custom cutters (See Figure 10). Oklahoma and Kansas led the field by far as states of origin, followed by Texas and North Dakota. How much grain was harvested by custom cutters not reached by the survey or not responding to it was impossible to tell. The results obtained were enough to show the continuation and the importance of custom combining in the Great Plains. The business had far outlasted its early critics and detractors.



Number in each state is percentage of outfits from the state.

Figure 10. Principal States of Origin for Custom Combine Outfits, 1971

FOOTNOTES

[1]Tucker, "Self-propelled Combine," Agricultural Engineering, Vol. XXV, p. 334.

[2]John Lewis Fischer, "Custom Wheat Harvesting in the Economy of Western Oklahoma," Master of Science thesis, Oklahoma Agricultural and Mechanical College, 1949, p. 12.

[3]Nebraska State Employment Service, Post-Season Farm Labor Report--1948, pp. 9-10. Information in Table II from tables in this and other farm labor reports by the Nebraska State Employment Service.

[4]North Dakota State Employment Service, North Dakota Harvest Labor Report, 1948, pp. 5-6, appended Farm Labor Bulletins.

[5]Robert B. Gilkison, "Wheat Harvest Pattern," Employment Security Review, Vol. XVII, No. 3 (March, 1950), p. 30; Nebraska State Employment Service, Post-Season Agricultural and Food Processing Report for State of Nebraska, 1949, p. 6; North Dakota State Employment Service, North Dakota Harvest Labor Report, 1949, pp. 8-9, appended Farm Labor Bulletins. Information in Table III from tables in this and other harvest labor reports by the North Dakota State Employment Service.

[6]Nebraska State Employment Service, Post-Season Agricultural and Food Processing Report for State of Nebraska, 1950, p. 3, 1951, p. 3; North Dakota State Employment Service, North Dakota Farm Labor Report, 1950, pp. 5-6, appended Farm Labor Bulletins, 1951, pp. 15-18, appended Farm Labor Bulletins.

[7]Charles M. Williams, "Enterprise on the Prairies," Harvard Business Review, Vol. XXXI, No. 2 (March-April, 1953), pp. 101-102; Nebraska State Employment Service, Post-Season Agricultural and Food Processing Report, Nebraska, 1952, p. 4; North Dakota State Employment Service, North Dakota 1952 Farm Labor Report, p. 10, appended Farm Labor Bulletins.

[8]Nebraska State Employment Service, Annual Agricultural and Food Processing Report, 1953, Nebraska, pp. 2-3, 6, 1954, pp. 3, 6.

[9]Oklahoma Employment Security Commission, Oklahoma's Farm Labor Report, 1957, p. 3; Nebraska State Employment Service, Annual Agricultural and Food Processing Report, 1957, Nebraska, pp. 5, 10; Montana State Employment Service, Farm Labor Report, 1957, p. 4.

[10]Oklahoma Employment Security Commission, Farm Labor Report, 1958, pp. 4-5; Nebraska State Employment Service, Annual Agricultural and Food Processing Report, 1958, Nebraska, p. 4, 1959, p. 3.

[11]Personal interview, Russell Snell, Ellinwood, Kansas, March 13, 1977.

[12]Personal interview, Jack Schlessiger and Jan Schlessiger, Claflin, Kansas, March 17, 1977.

[13]"Harvesting Corn by Combine," a symposium of papers, Agricultural Engineering, Vol. XXXVI, No. 12 (December, 1955), pp. 791-802; George E. Pickard, Combining, Drying, and Storing of Corn (Moline: John Deere, Inc., no date), John Deere Company Archives.

[14]Noxious Weeds Division, Bureau of Plant Industry, Nebraska State Department of Agriculture, registers of custom combines inspected at ports of entry, 1969, files of Nebraska State Department of Agriculture, Lincoln, Nebraska. Original registers have been destroyed; only copies extant are in possession of the author. Information in Figure 5 and Figure 6 compiled from these registers. Some items of information are missing or illegible on certain entries, meaning that the number of units considered in different segments of this study is not always equal to the total number of entries.

[15]Division of Motor Vehicles, South Dakota Department of Public Safety, South Dakota Non-Resident Custom Combiners Permits, files of the South Dakota Department of Public Safety, Pierre, South Dakota. Information in Figure 7 and Figure 8 compiled from these permits.

[16]Epic Research, Inc., untitled report listing custom combiners in Montana in 1976. Epic Research, of Helena, Montana, compiled the report from custom combiners' permits issued by the Gross Vehicle Weight Division, Montana Department of Highways. Permits in files of the Montana Department of Highways, Helena, Montana. Information in Figure 9 compiled from this report.

[17]Author's correspondence with North Dakota Highway Department.

[18]William F. Lagrone and Earle E. Gavett, Interstate Custom Combining in the Great Plains in 1971 (Washington, D. C.: Economic Research Service, United States Department of Agriculture, 1975), throughout. Information in Figure 10 from tables in same source.

CHAPTER IV

CUSTOM COMBINING IN THE AGRICULTURE OF THE GREAT PLAINS

The business of custom combining grew up in response to difficult circumstances associated with World War II, but in ensuing years the industry established a secure niche in the agricultural economy of the plains. Custom cutting was a hazardous, unpredictable business, for each cruel cycle of the agricultural economy affected it. Moreover, custom cutting was based on the most hectic and anguishing aspect of farming, the harvest. Yet the business showed remarkable tenacity. For economic and emotional reasons, professional custom cutters rode out hard times and refused to quit.

The business survived because these entrepreneurs of the harvest filled the particular needs of farmers on the plains. They also achieved their own goals, generally the ambitions of frustrated farmers seeking outlets for initiative and capital. After the first few years of the business, custom cutting was free enterprise in an almost pure sense, with all the attendent problems and benefits. Without effective central direction, there was no preventing temporary difficulties when contraction followed agricultural expansion. Even in the midst of agricultural conditions so often swayed by fluctuations of the economy, actions of the government, and conditions of the weather, custom cutters imposed on the harvest measures of order, efficiency,

and flexibility. They accomplished this incidentally, as each individual operator attempted to stabilize his own business.

When a farmer hired a custom cutter, he paid his money for three commodities--machinery, labor, and expertise. The combine was an investment both expensive and seasonal. The intricacies of its mechanisms and the bulk of its materials made the combine the most costly machine a farmer might own, but it was used only for the few frenetic weeks of harvest and stood idle the rest of the year. If stored outside, it depreciated rapidly; if kept inside, it took up shed space. For many farmers the combine was a mechanical elephant not worth the expense of keeping. They preferred to hire custom cutters, who put machinery to use for the entire summer and fall.

Farmers also found it difficult to recruit the laborers they needed for harvest, because the work was only for short duration. Prior to the coming of the combine, unskilled migrant workers filled out harvest and threshing crews, working under the watchful eyes of farmers and threshermen. Harvesting with combines required men with certain skills beyond those of an educated pitchfork. Workers not only had to be able to drive combines and trucks, but also had to understand their operation enough to do maintenance and make adjustments. A few men qualified for such work moved unattached with the harvest each year, as had the bindlestiffs before them, but farmers did not like to depend on them. On the other hand, custom cutters hired workers for the entire harvest season, and if some were green at the start of the year, they soon learned the skills they needed. Custom cutters relieved farmers of the problem of finding experienced help.

Finally, custom cutters brought specialized knowledge to their task. Farmers harvested for only a few weeks of the year and spent the rest of their time at other pursuits. They were skilled in many jobs, but spent too little time at the wheel to become experts in the operation of combines. Custom cutters made their living by harvesting and knew more about combines than anyone else. Although farmers wondered whether custom cutters were as careful in saving other people's grain as they might be their own, they acknowledged the ability of custom cutters to do good work when they were so inclined.

The employment of custom cutters appealed to certain classes of farmers more than to others. Custom cutters agreed that their customers fell into rough classes, big farmers and small farmers, with limits undefined. Farmers with only small acreage, perhaps a quarter or half section, employed custom cutters because combines were inordinate investments for them. Part-time farmers especially favored custom cutters because their other work did not allow them to supply the concentrated effort required for the harvest. The same was true for farmers on the verge of retirement, but still farming a little. Especially on the eastern edge of the area of operations for custom cutters there were many small landholdings belonging to people with no choice but to hire custom cutters.

Farmers operating large acreages hired custom cutters more from choice than from necessity. Big farmers found that harvesting their crops required enormous amounts of capital and troublesome dealings with labor. It also taxed their skills of management. Big farmers therefore chose to employ custom cutters' package offer of machinery, labor, and expertise. Farmers with acreages falling in the middle

range tended to do more of their own harvesting. They had enough use to justify owning combines, but not so much that they could not find and manage sufficient help for harvest.

These trends in hiring custom cutters began early in the history of the business, as was shown in a study of custom harvesting in Oklahoma in 1948. A survey of a limited sample of wheat farmers, seventy of them, found thirty-seven who did not own combines. Nearly all of these owned less than 300 acres of wheat, and nearly half owned less than 100 acres. These farmers obviously had no choice but to hire custom cutters, except for harvesting a bit of oats and barley with binders. Thirty-three of the farmers surveyed owned their own combines, but of these, many still hired custom cutters. The thirteen farmers with combines who each had less than 100 acres of wheat hired about a third of their wheat cut; the sixteen who each had between 100 and 300 acres, about a fifth; the four who each had more than 300 acres, about two-fifths.

With the price of wheat sliding in 1948, farmers indicated that they intended to cut back on hiring custom cutters in the future. Of farmers owning combines who had less than 100 acres in wheat, 54% had hired custom cutters at some time, but only 8% said they intended to do so again; of those with 100 to 300 acres of wheat, 91% had hired custom cutters at some time, but only 12% meant to do so again; of farmers with 300 or more acres of wheat, 75% had hired custom cutters at some time, but only 25% said they intended to do so again. Even many farmers who owned no combines indicated they would stop hiring custom cutters, presumably by buying their own machines. Farmers in general did not curtail hiring custom cutters in succeeding years as much as

the farmers in this sample said they would, for had they done so, custom combining would have shrunk into insignificance.[1]

The survey happened to catch the farmers at a time when they were frustrated and angry about the sudden reversal in the market for wheat. With prices falling below expenses, they did not see how they could afford to hire custom cutters in the future. They still regarded custom cutting as a temporary expedient, and a rather extravagant one. Few yet had paused to consider that custom harvesting might be the most economical method for many farmers, but in the following years it became evident.

Farmers, especially small farmers, also were dissatisfied with the service provided by custom cutters in 1948. More than a third of the farmers with less than 100 acres of wheat reported that custom combiners from outside the area did poor work, apparently meaning that they did not do an adequate job of saving grain. Lesser numbers of larger farmers agreed. About the same proportion of small farmers said that custom cutters did not "clean up the area," or finish all the wheat in the area before moving out, and larger farmers tended to agree. Other complaints were that custom cutters did not finish all the work on a farm before leaving, refused to cut fields isolated by distance from other work, or caused delays in harvesting because they were late in arriving in the area. All classes of farmers agreed to some extent with these contentions, but more important, in none of these complaints did the majority of farmers concur. The indication was that custom combining as a system was working satisfactorily, but that certain farmers had suffered bad experiences.[2]

Complaints about poor work voiced by small farmers were explainable on two counts. First of all, custom cutters could not have been expected to be as conscientious about harvesting for small farmers as for big ones. Some custom cutters might not care if they left a farmer of eighty acres unhappy with their work, for the job was too minor to worry about. However, a farmer with 500 acres to be cut was a customer to be cultivated carefully. Small farmers also complained more vocally because they felt helpless. Since fewer of them owned combines, they were utterly dependent on custom cutters. If a small farmer unfortunately hired a custom cutter who did poor work, he had little recourse. If he ran the harvesters off his place, then the word went around that he was too picky to work for, and the farmer was likely to end up with no one to cut his wheat.

Although the quality of work done by custom cutters improved greatly in succeeding years, the same sort of complaints survived, especially among small farmers. Small farmers continued to be the most critical of custom cutters' work, always with some justification. Because of this, many farmers chose to buy their own combines despite the savings of hiring custom cutters. They felt more secure having their own machines, even if they were old and decrepit ones.

Not only the size of farms, but also the type of farming operations determined whether farmers found it practical to hire custom cutters. The less the diversification in crops on a farm, the greater the need for custom cutters. Farmers who raised only wheat had short harvesting seasons and got only limited use from combines they owned themselves. They did better to hire custom cutters, regardless of how many acres they farmed. Farmers who had several different crops had

more extended periods of harvest. They might use their combines first for small grains and later for milo, corn, or beans.

Geography dictated many of the farming practices which in turn affected custom cutting. In the northern plains farmers often grew a variety of spring crops--wheat, durum wheat, barley, oats, and rye--each of them ripening at a slightly different time. By planning the time for windrowing the different crops, farmers could stretch out their season for harvesting small grains. In the southern plains there was less diversification in small grains, and because wheat was seeded in the fall, the grain ripened evenly and the harvest had to be done as quickly as possible. Extending the harvesting season on the southern plains depended on the possibility of raising some crop harvested in the fall, such as corn, milo, or soybeans. These fall crops needed either the adequate rainfall present on the eastern portion of the plains or else available water for irrigation.

There were other areas in which farming practices had special effect. In places where both spring wheat and winter wheat were grown, such as South Dakota, farmers could prolong the use of their combines, for the winter wheat ripened before the spring wheat. This made it more practical to own combines on the farm. The opposite effect was present in areas of the southern plains where farmers raised both cotton and winter wheat, such as northwest Texas. There if farmers wanted to own all their own harvesting machinery, they had to buy two complete sets--combines and cotton pickers. Therefore it was practical for many to rely on custom cutters to harvest the wheat.

In many smaller localities special conditions stimulated or limited the activities of custom cutters. The practice of terracing

made custom cutting more difficult, for combining on terraced fields had to be done in contour with the terraces instead of just circling the field. Location of highways also had an effect. Custom cutters were most numerous along major highways running north and south. They were less willing to unload and work on a small job if it was located some distance from the main highway than if it was right on their route.

Custom combining found its most secure place on the high western plains, rather than on the eastern fringe of the wheat belt. Farming on the high plains was characterized by large acreages and little diversification, unless groundwater for irrigation was available. The big farmers of this area needed custom cutters more than anyone else. They raised so little of any other crop besides winter wheat that they could use combines only for a short season. Inconsistent rainfall caused frequent crop failures. In a year of drought farmers with their own combines had valuable machinery standing idle. The suitcase farmers so prevalent in areas such as western Kansas and eastern Colorado, who lived in towns distant from their lands, had particular need for dependable harvesters whom they could hire and set to work with little supervision. The coming of irrigation changed all this in some places, as irrigated crops replaced dryland wheat, reducing the summer's business for custom cutters. Yet because of convenience or because of habit from earlier times, many farmers practicing irrigation continued to hire custom cutters, not only for their wheat, but also for fall harvest of corn or milo.

The difference between custom cutting in an irrigated area and in a dryland area could be pronounced, even between two localities in close proximity. For instance, the area of Garden City, on the Arkansas River

in western Kansas, blessed with a generous supply of groundwater, developed much diversified farming dependent on irrigation. There custom combining changed with the times: in order to keep their jobs, custom cutters sometimes had to consent to cut irrigated as well as dryland wheat, which slowed down their schedules. On the other hand, an increase in fall harvesting was a welcome development. Just to the north, in the area around Tribune, farmers lacked the water table to support irrigation. Custom cutting there continued to proceed in the traditional, hurried fashion that earlier had characterized all the winter wheat region.

Figures reported for the year 1964 by the Statistical Reporting Service of the United States Department of Agriculture showed the states where custom cutting was most prevalent (See Table IV). Texas and Oklahoma had the greatest percentages of wheat harvested by custom work, but considering the great acreage of wheat in Kansas, that state furnished more custom work in the wheat harvest than any other. The winter wheat states of the southern and central plains--Texas, Oklahoma, Kansas, Colorado, and Nebraska--all hosted much custom work in the wheat harvest. So did South Dakota, but North Dakota and Montana showed smaller percentages of custom work. Similar trends emerged for combining other grains, which included oats, barley, rice, flax, and milo. Texas, with its great acreage of other grains and its high percentage of them custom combined, was outstanding in this category. This reflected the large amount of custom milo harvesting done by crews from within the state during late summer.[3]

TABLE IV

PERCENTAGE OF WHEAT AND OTHER GRAINS CUSTOM COMBINED, 1964

State	Wheat		Other Grains	
	Thousands of Acres Combined	% Custom Combined	Thousands of Acres Combined	% Custom Combined
Texas	3,017	42	6,526	35
Oklahoma	4,201	40	1,440	33
Kansas	9,576	29	3,934	23
Colorado	1,707	35	699	35
Nebraska	2,953	32	3,059	26
South Dakota	2,139	35	3,615	25
Wyoming	224	24	210	26
North Dakota	6,236	21	6,842	15
Montana	3,724	22	1,828	25

Within individual states, as well as among them, the amount of custom combining done varied from region to region. This was illustrated by figures reported by the Kansas Crop and Livestock Reporting Service in 1976. These revealed the percentage of wheat custom cut in each of nine crop and livestock reporting districts in the state, as reported by county extension agents (See Figure 11). The eastern third of the state had little wheat and little custom cutting. The central third of the state had much more of both. The high percentage of custom work in the south-central district reflected

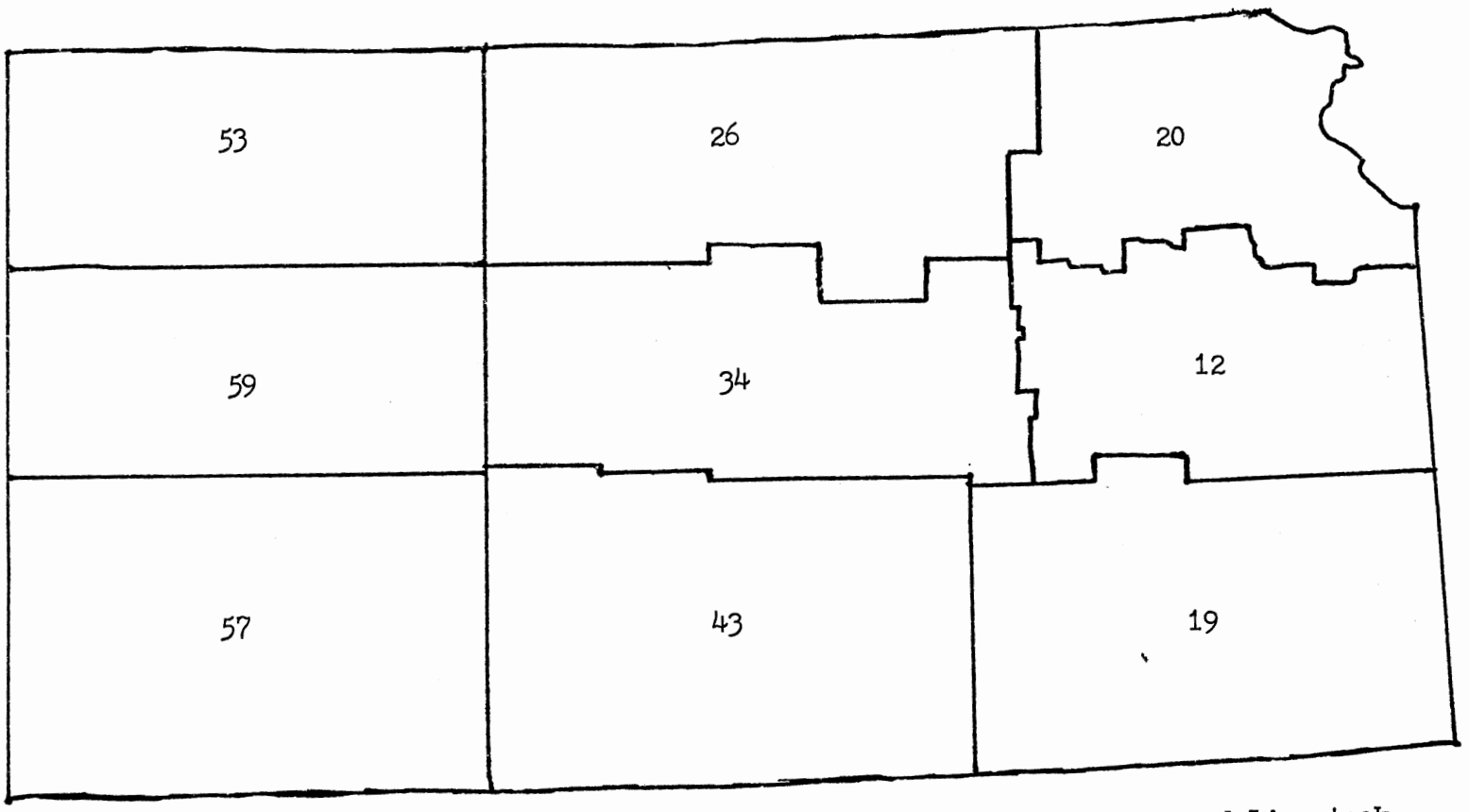


Figure 11. Percentage of Acres of Wheat Custom Cut in Kansas, 1976, by Crop and Livestock Reporting Districts.

the flow of custom cutters from the wheat regions around Enid in northwest Oklahoma, but less custom work was done farther north in central Kansas. The western third of the state had more than half of its wheat custom cut.[4]

Reports as to where custom cutting was most common showed not only the preferences of farmers, but also the settings in which custom cutters developed their harvesting itineraries, or routes, as they generally called them. In choosing where to work, custom cutters weighed the demand for their services in various areas, but they also were governed by other considerations. Most custom cutters also were part-time farmers, and so one point on each harvester's route had to be the home place, to harvest his own wheat. Custom cutters also tended to follow the line of least resistance along the best highways running north and south, sometimes thereby overlooking available work isolated from main lines of travel.

In other respects the route of each custom cutter developed according to a series of personal choices and chance events. Many beginning custom cutters were fortunate enough to start in the business in partnership with an experienced harvester who already had jobs arranged. Otherwise the novice headed for the vicinity of the Red River in May and moved from there to wherever he heard or hoped there was work available. Each time he found work, he tried to make an agreement with the farmer he cut for to come back and cut again the next year. In this manner, unless he went broke first, the custom cutter built his route, with much variation in it for the first few years.

Once custom cutters established regular routes, they generally were reluctant to change them. However, in any particular year one or more stops on a route might be wiped out by drought, hail, or some other disaster. In such cases custom cutters tried to find work to carry them over until they were needed at the next stop. This often meant trying another area, perhaps meeting a new customer, and then the establishment of a new stop on the route to replace the old one, not just for the single year but also thereafter.

In other instances custom cutters modified their routes because of deliberate decisions of management. Most custom cutters fell into one of two schools of thought: some were proponents of a western route, sometimes called the duster's route, while others were adherents of an eastern route, or a mudder's route. There were advantages and disadvantages to either approach. Custom cutters who kept to the high plains of the western route maintained that the way to make the most money was to cover the most acres, even if yields were poor. Farmers on the high plains offered jobs big enough to keep outfits busy without wasting too much time moving from place to place. Seldom was harvest delayed by rain or mud in the west. Even the dew was light, and so crews could work late into the night and start early in the morning without the wheat becoming too tough. The disadvantages of a western route were frequent crop failures and generally low yields.

Farther to the east yields consistently were higher, meaning greater revenues from charges for hauling and for high yields. Crop failures were rare, and when they came, they usually resulted from a local condition such as hail. The eastern route was more stable than the western route. The disadvantage was the greater frequency of rain.

Too often custom cutters found themselves unable to work because of wet wheat and muddy fields. Such idleness was the worse because it meant that outfits were delayed in reaching their next stops. Heavy dew also forced custom cutters to quit work soon after nightfall and to wait at least until mid-morning to begin.

The debate over western and eastern routes was only partly a result of conscious choices by custom cutters. More important in determining routes was the place of origin of the harvesters. Custom cutters from Texas, for instance, tended to stay to the west. Starting from their homes and moving north by the most direct routes, they traveled through western Oklahoma, the Texas Panhandle, western Kansas, eastern Colorado, and western Nebraska. If they went farther north, they generally headed for Montana rather than North Dakota. Custom cutters from central Oklahoma or central Kansas, on the other hand, tended to move straight north from their homes. This eventually took them into the Dakotas.

Partial shifts in route were common, nevertheless. Custom cutters who experienced several muddy years in central Kansas sometimes vowed to find a better way, and the next year found them in parts west. Others became disillusioned with work in North Dakota, maybe because of rain, perhaps because of the scarcity of work, or even just because they were tired of hauling pickup headers to use there. Montana beckoned to them with its dry climate and its straight-cutting. So it was common for custom cutters to move not only north, but also west with the harvest. This was made easy by the later ripening of wheat at higher western altitudes. Custom cutters therefore could cut their way into central Kansas, for instance, and then switch tracks westward,

making another stop in northeastern Colorado. Others might cut through South Dakota and then leap to Montana.

Planning harvesting routes involved more than merely deciding on general areas in which to operate. It also meant arranging specific stops on the route at proper intervals. In this the custom cutter had to act judiciously: stops had to be far enough apart that there was sufficient time to finish one job before the next was ready, but close enough that there was little idle time between them. If stops on the route were close together, then the acreage cut at each had to be small. Custom cutters always hoped to develop routes with fewer stops and more acres at each stop. Small jobs were culled from the itinerary if additional work became available at major stops on the route.

Custom cutters also changed their routes gradually because of changes in practices by farmers. Sometimes custom cutters found that routes which had seemed well arranged for many years slowly became unmanageable. Looking over records of previous years, they discovered that the dates of harvest had changed, because farmers had begun planting varieties of wheat that matured earlier. Such dislocations sometimes forced custom cutters to break ties with farmers for whom they had harvested for decades. Other changes might be more sudden and obvious: increased summer fallowing meant less acreage of wheat; increased irrigation meant less wheat but more fall harvesting.

As fall approached each year, attrition thinned the ranks of combiners working the wheat harvest. Part-time farmers from the southern plains returned home to put seed in the ground and the children in school. Hired hands went off to high school or college. A hard core of combiners continued north with the wheat harvest into the

northern parts of North Dakota or the northwest parts of Montana, a few even moving into the prairie provinces of Canada. Along with wheat, there might be flax to pick up or sunflowers to combine.

Custom cutters who returned south did not necessarily quit custom cutting for the year. Most also made a fall harvest of corn or milo, usually in the areas of their own homes. The departure of custom cutters from the small grain harvest late in the year was not so much the end of the season for those leaving as merely a divergence in harvesting routes, some going on north, others back south.

The length of the harvesting season varied greatly among custom cutters. Larger outfits generally worked longer seasons than smaller ones. In 1971 the average length of season for outfits with one combine was eighty-nine days; the average for outfits with two machines was 119 days; the average for outfits with three combines was 125 days; the averages for outfits with more than three combines were about 150 days. These figures included both the small grain harvest and the fall harvest.[5]

Although some outfits made as many as ten or eleven stops in the small grain harvest, seven or eight stops were considered a full season. A few custom cutters, mostly from the southern plains, made only three or four stops. Often the last stop on the route, if it was in North Dakota or Montana, had the most acres. According to information about the harvest of 1977 supplied by thirty-two custom cutters, larger outfits made longer runs and made more stops in the small grain harvest than did smaller ones. Outfits with only two combines generally made five or six stops, while outfits with three or more machines usually made seven or more.[6]

Each stop on the route was made up of one or more specific jobs with farmers. Obtaining such jobs was a process usually unsystematized and often puzzling. After the early years of the business, when to meet the needs of wartime the government exercised some direction of custom cutters, harvesters usually eschewed governmental placement services. When custom cutters entered an unfamiliar town they parked in some place that harvesters were known to frequent, so that farmers would be able to find them. Then the custom cutters began asking around for work, probably visiting the county employment office and the county agent's office, but placing just as much confidence in restaurants, poolhalls, elevator offices, and implement dealerships. In this manner they often got leads as to which farmers needed harvesters. If not, then if they were ambitious, they began driving country roads looking for ripe wheat without any combines sitting around the farmyard. Stopping at each likely place, they inquired if the farmers needed combiners or knew of anyone who did.

At other times the situation was reversed, and it was farmers who sought harvesters. Then the farmers drove into town and looked for combines parked in the usual places, usually finding several outfits. From among them they made their choices of whom to approach with offers for work, acting on various criteria, some obvious and others unexplainable. Curiously, they examined the prospects. Some farmers seemed to choose by color; John Deere was a good brand, one might think, and so he looked for green, while others sought the crimson of Massey-Harris (Massey-Ferguson) or the silver of Gleaner-Baldwin (Allis-Chalmers Gleaner). Farmers looked over machinery to see if it was new and clean, examined license tags to see where the outfit was from, and scrutinized

crewmen to decide if they looked respectable. If a farmer like what he saw, he approached the boss with the casual question, "You looking for cutting?"--and a bargain was struck.

Such scenarios became scarcer with each passing year. Not only did custom cutters usually retain the same lots of customers year after year, but when they altered their arrangements, they tried to pass their customers on to friends. If a custom cutter had to abandon cutting for a particular farmer, he considered whether he had a fellow harvester who might appreciate the business, and his recommendation usually resulted in a satisfactory arrangement.

Some custom cutters also advertised for work. This was done best in agricultural periodicals, most notably in the High Plains Journal of Dodge City, Kansas, the closest thing to a marketplace in print for custom cutters. In classified advertisements under the heading, "Harvesting," custom cutters stated in what parts of the country they needed work. Occasionally custom cutters getting out of the business after some years of experience advertised to sell "established operations." This meant that buyers purchased not only the outfits' machinery, but also lists of steady customers.

Perhaps the most intriguing aspect of custom combining as a business was that such an important institution was held together by informal, verbal agreements. Written contracts between farmers and custom cutters were so rare as to be insignificant. If a custom cutter harvested for a farmer one year, it generally was understood that he would come back for the same job the next year, unless one of the parties had particular reason to be dissatisfied. An affirmative answer to the farmer's query, "Be back next year?" constituted an

agreement. Also understood was that either party might have to back out of the arrangement if circumstances dictated. The farmer might lose his crop to hail and be unable to offer any cutting. The custom cutter might be delayed by rain at an earlier stop. This posed an awkward situation. If the custom cutter left the job he was on in order to meet his commitment farther north, then the farmer he left behind would be embittered. If he stayed to finish the job he was on, then the next customer down the line grew anxious.

The only way to avoid hard feelings was through constant communication. This started long before harvest began. Custom combiners corresponded with their customers intermittently through the winter, affirming oral agreements but not formalizing them, asking how the wheat was doing and how many acres there would be to cut. Christmas cards were a handy excuse for such inquiries. Letters proliferated as spring progressed, as custom cutters preparing to leave for Texas tried to plan a definite route for the season. A few visited each prospective customer in the spring. This annual ritual of making the rounds was a sure way of cultivating steady customers.

As harvest began, custom cutters arranged for their customers to reach them by telephone wherever they were. If someone in the harvester's family stayed at home during harvest, then the home folks formed a control center for the outfit, taking messages from customers and keeping them informed as to where the outfit was. Otherwise the custom cutter gave each customer a list of telephone numbers where he could be reached at his various stops. Custom cutters seldom waited for farmers to call them during harvest, but instead ran up their own telephone bills in order to stay in touch.

If a custom cutter was unable to arrive at a job when the wheat was ready, usually because of rain and mud, he informed the farmer concerned. If the relationship between the two was longstanding, then the farmer was willing to wait a couple of days, but probably not more than that. When the farmer decided he could wait no longer, he sought someone else for the job. He was expected to notify the custom cutter of this and generally did so.

At other times the custom cutter took the initiative in suspending an agreement. He might inform the customer he was working for that he could delay there no longer and had to move on to his next job. This almost always caused hard feelings, and so the custom cutter tried to find some other harvester to finish the work if possible. As an alternative the custom cutter might call ahead and tell the next customer on his itinerary to go ahead and hire another cutter. He made the decision as to whom to break an arrangement with on the basis of which job had the most acres to cut and which customer he had worked for the longest. A custom cutter with three or more combines had an advantage in situations like this. He could send a respectable outfit of two machines ahead to his next job and leave a single machine to clean up in the mud.

Some of the largest outfits planned their routes with the idea of splitting up to work in two or more parties most of the time. The separate contingents either could leapfrog past each other from stop to stop, or they could move parallel to each other on a series of jobs, coming together only for the biggest ones. The outfit of Bernel Elmore of Shattuck, Oklahoma, perhaps the largest outfit in the field in 1977 with fifteen John Deere combines, split into two contingents for most

of the season. All the machines were together only for the beginning of the season in Texas and the end in Montana.

The system of verbal agreements held together remarkably well. It was reliable enough that farmers trusted it and custom cutters planned on it, and yet flexible enough to allow for adjustments due to unforeseen circumstances. Sometimes individual farmers or custom cutters acted irresponsibly, and such actions left a bitter taste. "When we were first starting out," recalled one custom cutting wife, "I remember my husband calling ahead for a job of cutting for a farmer. He kept in touch for at least a month, then after traveling 6 or 8 hours getting there, with our trucks and machines, we found another crew in the yard. The farmer then proceeded to bargain for who would cut the cheapest." She added, "We left immediately and have not returned to that area."[7] Such occurrences were memorable because they were out of the ordinary.

Both economic self-interest and personal honor worked to enforce the discipline of informal contracts. The unwritten code of custom combining was a flexible one, but the person who stretched it beyond reason suffered the consequences. The custom cutter who failed to live up to his obligations to a farmer found it hard to obtain work in the locality the next year. Likewise if a farmer reneged on an agreement, the word spread among custom cutters working the area, and the farmer might be left with no harvesters at all. Most farmers found it best to hire the same cutters each year and to pay them the going rate for harvesting. Perennial dependability was more important than the possible savings of a half-dollar to the acre in rates, money which might be lost anyway to careless threshing by an unfamiliar cutter.

The manner of quoting the going rate, or charge for cutting small grains, became standardized early in the history of custom combining. Custom cutters charged a set fee for each acre combined, whether the grain was straight-cut as it stood or picked up from the windrow. Added to this base rate was a charge for each bushel hauled to storage. There was an extra charge for combining fields with high yields, a specified number of cents for each bushel to the acre more than twenty. The price for combining an acre was expressed in dollars, the price for hauling in cents, and the price for high yields also in cents, the three numbers being quoted together in the parlance of the harvest. A charge of "eight, ten, and ten" meant that the custom cutter received eight dollars an acre as a base rate, ten cents a bushel for hauling, and ten cents for every bushel of yield more than twenty bushels to the acre.

Amendments to this formula adapted it to special situations. Hauling charges included an escalator if the distance to the elevator was too far. This meant that added to the usual rate for hauling there was an extra charge on each bushel for every mile more than five miles that it was hauled. If the rate for hauling was ten cents, and an escalator of a cent was added, then the cost of hauling a bushel ten miles to an elevator was fifteen cents. If wheat was to be hauled only as far as a bin on the farm, then the charge for hauling was lessened. In such a case the custom cutter might even relinquish all charges for hauling and negotiate a flat rate for combining and hauling to the bin, which would be expressed by a phrase like "nine dollars in the bin."

In some other cases it was obvious that the yield from a field would be low, for instance in a field damaged by drought or hail. The

custom cutter and the farmer then might agree on a simple, low flat rate to salvage the little grain left standing. The situation might be quite different. Perhaps a combination of rank growth and untimely rains caused good wheat to lodge. Then the custom cutter might demand extra compensation for the slow work necessary to save grain lying close to the ground. In any situation the custom cutter might alter the formula of his rates to fit personal preferences or special crops. Custom cutters often discriminated in favor of large customers, waiving certain charges in order to obtain their business. Some farmers preferred to pay for combining from the windrow by the bushel rather than by the acre. Combining malt barley for brewing, for instance, was a special case. The grain had to be threshed carefully, sometimes under the eyes of supervisors from the brewery, to avoid cracking, which spoiled the barley for brewing. The payment for such work was by the bushel.

The going rate for combining in any year was the result of a free market, but did not necessarily reflect perfectly the relationship of supply and demand. The demand for custom work depended on the acreage to be harvested, the yield of the crop, and the ability of farmers to pay for harvesting. When the market for wheat was strong, farmers planted more acres and were better able to pay for harvesting. Rates then rose rapidly. When the market for wheat declined, then farmers planted fewer acres and had less cash to pay for harvesting. However, at such times there was no sudden decline in the going rate for cutting. Instead the rate remained about the same, and the collapse in the market was reflected in less work available. In good times custom cutters reaped quick profits on high charges which farmers regarded as

painless at the time. In hard times rates seldom declined, but instead locked into archaic schedules with no allowance for steadily increasing expenses.

Prices also varied a bit from region to region in any one year. As harvest began along the Red River, a surplus of combines usually arrived before the wheat was ready, and so rates for cutting in northern Texas and southern Oklahoma often were slightly lower than those farther north. As the harvest entered full swing in central Oklahoma and southern Kansas, the going rate prevailed unless there was some special circumstance. The price sometimes dipped again in Nebraska because of the chronic surpluses of combines there. The going rate then ruled on north to the Canadian border. In Canada the rate often was lower than in the United States.

Rates received during the early 1940s were excellent for the times. The going rate from 1942 through 1947 was three-fifty, five, and five, meaning $3.50 an acre base rate, five cents a bushel for hauling, and five cents a bushel for each bushel per acre more than twenty. Base rates of $3.00 or $4.00 an acre also were common. Usually there was a charge of a half-cent per bushel per mile for hauling wheat more than five miles. As the harvest began each year in Texas, base rates generally were lower, about $2.50 an acre.[8]

These rates did not collapse with the coming of hard times after 1948. For more than two decades thereafter rates stayed about the same, fluctuating only occasionally with temporary circumstances. The going rate constituted a floor below which rates rarely dipped, but custom cutters were unable to pass on increased costs or compensate for inflation.

Intermittent records of rates kept by various state agencies confirmed the recollections of custom cutters about these difficult years for the industry. From 1948 through 1953 the North Dakota State Employment Service reported prevailing rates of three-fifty, five, and five or four, five, and five each year. An average base rate of $2.31 an acre reported for Alberta in 1950 showed the lower trend there. The Nebraska Crop and Livestock Reporting Service recorded custom rates for certain years in the 1950s and 1960s, but failed to note the rates by the formula which custom cutters used. The only trend plain from the compilation was that the base rate held about even at $3.50 or $4.00.[9]

Relief from low rates started in 1973 and continued in the next few years. From 1974 through 1976 rates of eight, ten and ten were common. The rising trend was evident in rates reported by the Kansas Crop and Livestock Reporting Service in a number of years (See Table V). A report for Texas in 1973 showed that the increase in rates that year began there, but that prices never reached the levels of the going rate farther north the same year. The base rate most frequently charged there was $4.00, and the average was about the same. The charge for trucking rose to ten or fifteen cents, but the charge for high yields remained a nickel. Returns from South Dakota in 1970 and 1975 reflected a rise in the going rate from three-fifty, five, and five to eight, ten, and ten. Rates in Canada also rose, but lagged behind those in the United States. The Saskatchewan Department of Agriculture recommended a base rate of $7.00 in 1975 and $8.00 in 1976, and the Canadian dollar suffered slightly in the exchange for United States currency.[10]

TABLE V

RATES FOR CUSTOM WHEAT HARVESTING IN KANSAS, 1961-1976

Year	Average Base Rate per Acre for Combining	Average Charge per bushel for Hauling	Average Charge per bushel for High Yields
1961	$3.65	$ .05	$ .05
1965	3.52	.05	.05
1970	3.76	.05	.05
1973	4.83	.05	.05
1974	8.09	.09	.09
1975	8.45	.09	.09
1976	8.66	.09	.09

Rates for harvesting other small grains were about the same as for wheat. On the southern plains, where combining oats or barley was unusual work, rates for these crops ran a few cents higher than rates for wheat. In the Dakotas, where more oats, barley, and rye were grown, rates for these small grains ran slightly less than those for wheat.

Custom cutters adapted the formula by which they charged for combining small grains and applied it also to milo. The only difference in principle was that the charge for high yields applied to every bushel more than thirty or forty to the acre rather than twenty. The base rate per acre for combining milo averaged higher than that for cutting wheat. In 1961 in Kansas, for instance, the average base rate for milo was $3.80, fifteen cents above that for wheat. The margin spread a few

cents each year until by 1975 the average base rate for milo, $9.28, was eighty-three cents higher than that for wheat. However, the rise in the price for milo harvesting occurred at the same time as that for wheat. Charges for hauling and for high yields were about the same per bushel for milo as for wheat. Because yields for milo were higher than those for wheat, the total charges accumulated for hauling were much higher.[11]

Charges for combining corn sometimes were computed on a different basis. The usual practice in areas growing dryland corn, such as eastern Kansas, was to charge a base rate for each acre and an additional charge for each bushel combined. This was economic recognition that in corn harvesting, high yields were as much a factor in how difficult a job was as was acreage. Rates for combining corn by this formula moved upward parallel to those for wheat. The Kansas Crop and Livestock Reporting Service first reported rates for combining corn in 1970, recording an average rate of $5.65 an acre plus $.04 a bushel. In six years these charges about doubled. In 1976 the average reported rates were $12.13 an acre plus $.08 a bushel. Added to these prices were hauling charges at levels about the same as those for wheat. Where irrigated corn was grown, like in western Kansas, prices were figured by a different formula. Hauling charges were much the same, but the base rate for cutting was expressed in a rate per bushel, the number of acres being irrelevant when yields were as high as they were under irrigation. From 1970 to 1976 the rate for this sort of work advanced from $.10 a bushel to $.19 a bushel. In some cases charges for cutting irrigated milo also were figured by the bushel.[12]

Rates charged for custom combining were part of the relationship between custom cutters and the customers they served. Just as important from the point of view of custom cutters was the relationship between their own two occupations, custom cutting and farming. Only a small elite among custom combiners did nothing else for a living. A few held some other job in the off-season, but the great majority were part-time farmers, part-time custom cutters. These were of two classes--winter wheat farmers and spring wheat farmers. Both classes fashioned their harvesting seasons in such a way that they also could get their farm work done at home.

This planning was easier for spring wheat farmers. After sowing their wheat, they had no major tasks to perform at home until harvest, and so they were free to head south as long as they returned in time to swath and combine their own crops. They only needed to arrange for someone, probably a member of the family, to take care of the stock and a few chores.

For winter wheat farmers the situation was more complicated. They were relatively free from major tasks on their farms in the spring until the harvest, but then there was plowing to do. Throughout the summer the plowed ground had to be worked after each rain. Some custom cutters therefore relied on other members of the family to do the field work at home while they moved on north. Fathers, sons, or even wives assumed these tasks. In other cases some neighbor did the field work on a custom basis, or a man was hired to do it. Older farmers who were partially retired often were available for this sort of work. Another possibility was to release men from the harvest crew when it was necessary to do field work. A man or two might stay behind to finish the

plowing after the rest of the crew moved on and then rejoin them when it was done. For the rest of the season, whenever men could be spared from the crew--especially during rainy spells--they hurried home to work the ground and then rushed back to the combines.

For both spring wheat and winter wheat farmers, custom cutting took the place of any diversified farming that they might have considered in addition to small grains. Because summers were occupied with harvesting, custom cutters were not at home to irrigate, cultivate, or do any of the other tasks associated with diversified farming. All these things were possible only if there were enough members of the family who could remain at home to do them.

The economic reasons why men became custom cutters varied with the times. During the early years the motivation was simple opportunism, for it was obvious that profits were being made. The returning serviceman, the restless farmer, or any man on the make needed only a bit of capital and a few workers to get started. "No college education, I liked machinery, and custom combining seemed to be the coming thing," one Kansan who started custom cutting in 1947 summed it up.[13]

Farmers, since they owned the necessary machinery and had deferments from the draft, had the advantage in starting in the business. Interviews with seventy-one custom cutters in western Oklahoma in 1948 showed that forty-four of them also were farmers. Eleven held other occupations, including implement dealer, mechanic, truck driver, blacksmith, barber, schoolteacher--and even owner of a skating rink. Sixteen of the custom cutters said they were full-time, professional harvesters. The custom cutters who farmed had large farms for the times, averaging 650 acres, with 462 acres in wheat. Since some of the

acreage must have been fallowed, it was obvious that these part-time farmers grew wheat and little else. Many of them stated that they planned to custom cut only long enough to pay for their combines. Others hoped to employ themselves profitably during the slack seasons of work which accompanied farming of a single crop. It seemed sensible to put not only idle machinery, but also idle sons to work at such times.[14]

One particular group of industrious farmers contributed more than its share of recruits to the ranks of early custom cutters. Mennonites were conscientious objectors with the men, machinery, and willingness to enter the business of custom combining. In 1942 investigators from the Economic Research Service compiled a map with dots showing points of origin for custom combines. A cluster of dots covered the area of Newton, Inman, and Moundridge, Kansas, where there were concentrations of Mennonites. The tradition of custom cutting established early continued among Mennonites of the area. Farmers considered Mennonites ideal custom cutters, honest and reliable.[15]

In time the element of opportunism in custom cutting diminished, as bad years drove out those who had entered the business in hopes of quick profits. This strengthened the relative role of part-time farmers in custom combining. People with other profitable occupations abandoned custom cutting; part-time farmers tried to make ends meet by working harder at both farming and harvesting. The Economic Research Service concluded that 91% of the custom cutters operating in 1971 were part-time farmers or ranchers.[16]

Entrants into the business during the 1950s and 1960s seemed less attracted to it than driven to it by poor conditions in agriculture.

Asked why they began custom cutting, many answered that they turned to it as a last resort because they could not make a living on their farms. One custom cutting wife explained that she and her husband were unable to obtain land they needed for expansion "because of some farmers getting too hoggish," and so the alternative was custom cutting. "I couldn't get a hold of any more land and so I had to do something else," wrote another harvester. A third concurred, "My farming operation was not big enough to justify the cost of machinery and I could not rent more land so I went into this. Since we had 4 boys and 1 girl it worked out real good as a family operation."[17]

A farmer from Saskatchewan turned custom cutter when stifled by Canada's system of marketing quotas designed to maintain prices for grain. Under the Wheat Board's quotas he was permitted to market only six bushels from each cultivated acre. Custom cutting gave him an outlet for initiative when he had to cut back on farming.

Other custom cutters played variations on the same themes as to why they began in the business. "Could not afford to have those high price machines sitting around," noted one, while others hoped to make enough money custom cutting to purchase additional land or machinery. One quit farming and had three sons and two combines on his hands, making custom cutting a logical option. Another saw his corn-grinding business in Kansas declining and moved naturally into another line of custom work.[18]

The sad straits forcing farmers into custom cutting did not mean that entrepreneurism had vanished from the business. There still was the chance for an ambitious young man to use custom cutting as a vehicle to a better life. A good example was Loren Unruh of Great Bend,

Kansas. He grew up on a farm west of there, and in 1963, after he had finished basic training for the Army Reserve, he began custom cutting with a single combine. He expanded his business ambitiously and eventually became a partner in an outfit of six machines. A practical businessman, he began custom combining with the goal of raising capital for other opportunities. First he bought additional farmland with his father, and then he opened a popular and successful steak house in Great Bend.[19]

Another young man made good was Ron Roessler, who grew up on a farm near Manhattan, Kansas. He had custom combined for a few years locally while a college student, but he gave it up in 1970 to go to graduate school in Iowa. There he saw so many combines standing idle in the summer waiting for corn harvest that he decided to put some of them to work. In the summer of 1971 he leased five combines and entered the harvest in Kansas. His first few years in the business were the makings of a textbook on how not to succeed as a custom cutter, but sympathetic bankers carried him through, eventually to purchase his own combine. In so doing he proved that a young man with little capital could work his way into a business that required heavy investment.[20]

The custom cutters who lasted through hard times showed remarkable tenure in their business. More than 65% of the custom cutters surveyed by the Economic Research Service in 1971 had at least ten years' experience in the business. Only about one custom cutter in twenty had not custom cut for at least two years before. A survey of thirty-nine custom cutters in the harvest of 1977 showed that they had an average of more than fourteen years' experience.[21]

Not only did custom cutters remain in the business for long tenure, but they also brought up their sons to carry on in the trade. Nearly all custom outfits during the later years of the business contained two generations, and many benefited simultaneously from the experience of a grandfather, the vigor of his sons, and the enthusiasm of his grandsons. Daughters of custom cutters frequently lured their husbands into the business. Trusted employees sometimes worked their way into partnerships in custom outfits, but more often acquired their own machines and began on their own.

New generations of custom cutters knew the hectic days of the Harvest Brigade only by faded photographs and by stories that they grew tired of hearing. They entered the business by inheritance and thought of it as part of the natural order of affairs, not as merely a by-product of World War II. They were the best evidence that custom combining had become an established institution in the agricultural economy of the Great Plains.

FOOTNOTES

[1]Fischer, "Custom Wheat Harvesting in the Economy of Western Oklahoma," pp. 89-90.

[2]Ibid.

[3]Economic Research Service--Statistical Reporting Service, United States Department of Agriculture, "Uses of Agricultural Machinery in 1964," Statistical Bulletin No. 377, p. 4. Information in Table IV adapted from table in this source.

[4]Percentages indicated in Figure 11 supplied by the Kansas Crop and Livestock Reporting Service, Topeka, Kansas.

[5]Lagrone and Gavett, Interstate Custom Combining in the Great Plains in 1971, p. 21.

[6]Information from questionaires returned to author by custom combiners. Questionaires were mailed to nearly two hundred custom cutters who bought custom combiner's permits in South Dakota in 1976. Forty were returned.

[7]Comments enclosed with a questionaire returned to author.

[8]John V. Hepler, Farm Labor Program for Wheat and Small Grain Harvest in Great Plains States with Special Reference to Utilization of Migratory Workers in 1945 (Washington, D. C.: Agricultural Extension Service, United States Department of Agriculture, 1946), p. 3.

[9]Information on custom rates from these sources: North Dakota State Employment Service, North Dakota Harvest Labor Report, 1948 and 1949, North Dakota Farm Labor Report, 1950, 1951, 1952, and 1953, including appended Farm Labor Bulletins; H. K. Scott, Farm Labor and Machinery Costs in Alberta, 1950 (Ottawa: Marketing Service, Economic Division, Dominion of Canada Department of Agriculture, 1952), p. 15; publications on custom rates by Nebraska Crop and Livestock Reporting Service, 1957-1959, 1962, 1968, 1970, excerpts provided by Nebraska Crop and Livestock Reporting Service, Lincoln, Nebraska.

[10]Information in Table V extracted from tables in Kansas Crop and Livestock Reporting Service, Custom Rates for Farm Operations, 1961 and 1965, Rates for Custom Farm Operations, 1970, and Kansas Custom Rates, 1973, 1974, 1975, and 1976. Additional information from Ronald R. Poenisch and J. Michael Sprott, "Custom Farm Machinery Rates in Texas--1973," Texas Agricultural Extension Service Fact Sheet L-1317;

South Dakota Crop and Livestock Reporting Service, Custom Rates for Farm Operations, South Dakota, 1970 and 1974; Saskatchewan Department of Agriculture, 1975 Custom Rates, 1976 Custom Rates, and 1977 Custom Rates.

[11]Information on custom harvesting rates for milo from same sources as information on custom rates for wheat, particularly the publications of the Kansas Crop and Livestock Reporting Service.

[12]Kansas Crop and Livestock Reporting Service, Rates for Custom Farm Operations, 1970; Kansas Crop and Livestock Reporting Service, Kansas Custom Rates, 1976.

[13]Quote from questionaire returned to author.

[14]Fischer, "Custom Wheat Harvesting in the Economy of Western Oklahoma," pp. 14-15.

[15]Hecht, Transient Combine-Harvester-Thresher in the Great Plains, 1942, appended map.

[16]Lagrone and Gavett, Interstate Custom Combining in the Great Plains in 1971, p. 17.

[17]Quotes from questionaires returned to author.

[18]Questionaires returned to author.

[19]Personal interview, Loren Unruh, Great Bend, Kansas, January 9, 1977.

[20]Personal interview, Ron Roessler, Buhler, Kansas, December 5, 1976.

[21]Lagrone and Gavett, Interstate Custom Combining in the Great Plains in 1971, p. 16; questionaires returned to author.

CHAPTER V

PILGRIM CAPITALISM: ASPECTS OF A PECULIAR BUSINESS

"My father started combining in 1947," wrote a frustrated custom cutter from Alva, Oklahoma, "when a new combine cost about $1800 and he got around 4 or 5 dollars per acre for combining and hauling. Now /1977/ my combines cost $38000 and I get about $8 per acre for combining. It can't work no way, even if I cut more than he did." Added another combiner from Oklahoma City, "I have only been harvesting for six years, but in that short time my expenses have quadrupled."[1] As custom cutters looked forward to what they believed would be a disappointing season in 1977, they voiced a host of complaints. As so often in the past, economic forces beyond their control had wrought turmoil in western agriculture and indirectly in custom cutting.

The business of custom combining enjoyed brief periods of prosperity, but most of the time custom cutters struggled against conditions like those in 1977. Rising expenses bumped up against static rates for harvesting, and the rates moved not at all. Only when farmers enjoyed prosperity could custom cutters push rates comfortably above expenses. Custom cutters whose skills of management were inadequate to carry them through hard times were driven out like chaff. Custom combining became the business of the elite among harvesters, pilgrim capitalists who

developed the methods they needed to succeed and stamped their business as unique.

Custom combining was a business of individuals and of families. Few custom outfits were incorporated. State records of permits issued to custom harvesters showed hardly any machinery registered in the names of corporations, although some combines might have been recorded under the names of individuals but owned by corporations. Of forty custom cutters polled in 1977, only one had incorporated his operation.[2] When custom cutters chose to incorporate, rarely was it for the purpose of raising capital. Corporations were designed to permit members of the family a share in ownership, to integrate operations of farming and custom cutting, and to avoid disastrous inheritance taxes.

Partnerships were much more common among custom cutters than were corporations. Members of a family, most often fathers and sons but frequently brothers, sometimes formed traditional types of partnerships, with joint ownership of machinery. More commonly they formed working partnerships. This meant that they supplied machinery under individual ownership, for instance a father and a son each owning a combine, but worked on jobs together and shared expenses and profits in proportion to the amount of machinery supplied by each. Working partnerships like this were common also among custom cutters who were not relatives. Occasionally working partnerships were formed on an intermittent basis. Two custom cutters might agree to work together at certain stops on their routes, but to go their separate ways the rest of the time. This allowed them to form a large outfit to handle big jobs, but to split up where the jobs were small. Custom cutters who ran their outfits by themselves, with no partners, assumed formidable

duties. Situations that required them to deal with customers or other outsiders at the same time they supervised their crews arose continually.

The measure of a custom cutter was his combines. When asked how large his outfit was, a custom cutter would answer quickly with the number of machines he operated and perhaps the makes and models. When asked how many men were in his crew, if it was a large one, he would start counting them on his fingers.

Custom cutters wanted no more combines in their outfits than they could manage efficiently. It was not unusual for a custom cutter to purchase additional combines during good times, only to discover that he had more machines than he could handle and to reduce the size of his outfit again. The level of most efficiency varied with individual talents, but for custom cutters as a class, certain sizes of outfits cut more acres to a machine than did others.

A study of custom outfits in Oklahoma in 1948 showed that custom cutters with the most combines planned to harvest more acres per combine than did those with fewer combines. Custom cutters with one or two combines in their outfits believed that they would cut about 1,800 acres to a machine in 1948. Custom cutters with more combines intended to cut 2,000 or more acres with each machine. Two circumstances might have tilted the balance in favor of the big operators in these estimates. Custom combiners with more than two machines usually were more experienced in the business than were those with only one or two and thus had more jobs arranged in advance. Also, since the figures recorded custom cutters' intentions and not acres actually cut, the bigger operators might have been bigger optimists than their fellows.[3]

Information gathered by the Economic Research Service in 1971 confirmed that up to a point, the more combines in the outfit, the more acres each machine cut. This was to be expected, for the smaller outfits also worked shorter seasons. However, efficiency began to decrease with the addition of the fifth combine to an outfit. The acres cut by each machine were fewest with the largest outfits. Apparently such large enterprises presented too many problems of management to keep all the machines running constantly (See Table VI).[4]

TABLE VI

ACRES COMBINED PER MACHINE BY DIFFERENT SIZES OF CUSTOM OUTFITS, 1971

Number of Combines in Outfit	Average Number of Acres Combined per Machine
1	1,682
2	1,845
3	1,907
4	2,062
5	2,023
6	1,829
7	2,014
8	1,572
9	no cases
10 or more	1,474
all outfits	1,971

Thirty-two custom cutters who reported the acreage they intended to cut in 1977 confirmed the general trends shown in 1971, with some variations. Custom cutters with two combines in their outfits planned to cut nearly 2,600 acres to a combine for the season, with the acres distributed among stops on the route to an average of 452 acres to a combine at each stop. Custom cutters with three combines reported great expectations. They intended to cut nearly 4,000 acres to each combine, which figured out to nearly 550 acres to a combine for each stop. This category happened to include a few operators with long routes and extended seasons. Custom cutters with four or more combines expected to harvest only about 2,200 acres to each combine, about 300 acres at each stop.[5]

Perhaps combines in larger outfits cut more acres, at least up to a point, but the average number of combines operated by custom cutters remained low. Most custom cutters fielded only one or two combines. Unknown, however, was how many of these custom cutters recorded in various records as individual operators joined with others to form working partnerships, thus making larger outfits but keeping separate ownership.

Custom cutters with single combines were most numerous in the initial years of the business. The typical outfit found working in Nebraska in 1942 was a single twelve-foot drag machine, a tractor, a truck, and three men. Hardly any outfits had more than one combine. By 1948 combiners in Oklahoma showed the effects of a few years' expansion, as among those surveyed were good numbers of outfits with two or three machines. Twenty custom cutters had one machine, twenty-three had two machines, and fifteen had three machines. The greatest

number of combines in one outfit was nine, but the average number was 2.5. The information indicated that custom cutters with several combines generally had started in previous years with only one and had added machines one at a time.[6]

The mode of two machines to an outfit was not just a stage in the expansion of the industry; it developed into the standard size of custom outfits through the years, at least as measured by the number of combines to an owner and disregarding hidden working partnerships. According to records of weed inspections by the Nebraska Bureau of Plant Industry, the average number of combines for custom cutters entering the state in 1969 was 2.2. Two combines to an owner was the modal size, but operators with single machines also were numerous. Custom cutters with three or four machines apiece controlled more combines as a group than did those with only one apiece, however (See Table VII).[7]

The Economic Research Service in 1971 found the same average of 2.2 combines to an owner among all custom cutters. The distribution of combines per outfit was quite similar to that in Nebraska in 1969 (See Table VIII).[8]

Information taken from harvester's permits in the files of the Montana Department of Highways revealed that in 1976, 2.1 combines to an outfit was the average for custom cutters working in the state. There was a greater proportion of custom cutters with only one machine and a smaller proportion of them with two (See Table IX).[9]

The indication from all this data was that although there were a few big operators on the road, most custom cutters remained small-time capitalists. Working partnerships no doubt raised the effective size

of many outfits, and larger outfits had importance beyond their numbers, for they controlled proportionally more of the number of combines than they did the number of outfits.

TABLE VII

SIZE OF CUSTOM OUTFITS IN NEBRASKA, 1969

Number of Combines per Outfit	Number of Outfits	% of Outfits	% of Combines
1	505	26.3	11.9
2	834	43.5	39.2
3	341	17.8	24.1
4	166	8.7	15.6
5	47	2.5	5.5
6	21	1.1	3.0
7	3	.2	.5
8	1	.1	.8
	1,918		

The number of combines to an outfit varied little with the state of origin of the outfit. In Nebraska in 1969 each of the five states of origin that supplied the bulk of the custom combines averaged between 2.0 and 2.4 machines to an outfit. Outfits from Texas averaged the largest. For all custom outfits surveyed in 1971, the eight states

providing the great majority of the machines averaged between 2.1 and 2.4 combines to an outfit. In this case outfits from Texas were of about average size, and outfits from North Dakota were the largest. Likewise returns for Montana in 1976 showed that the principal states of origin sent outfits averaging from 2.0 to 2.2 combines apiece. If in these several instances there were differences among the states of origin in the average size of outfits, the differences were less important than the similarities. In all cases the typical size of outfit was two combines, and the average size was slightly more.[10]

TABLE VIII

SIZE OF CUSTOM OUTFITS, 1971

Number of Combines per Outfit	Number of Outfits	% of Outfits	% of Combines
1	961	28.0	12.7
2	1,466	42.7	38.8
3	610	17.8	24.2
4	264	7.7	14.0
5	64	1.9	4.2
6	38	1.1	3.0
7	10	.3	.9
8	12	.3	1.3
9	0	.0	.0
10 or more	6	.2	.9
	3,431		

TABLE IX

SIZE OF CUSTOM OUTFITS IN MONTANA, 1976

Number of Combines per Outfit	Number of Outfits	% of Outfits	% of Combines
1	207	34.3	15.8
2	224	37.1	34.3
3	104	17.2	23.9
4	35	5.8	10.7
5	18	3.0	6.9
6	9	1.5	4.1
7	1	.2	.5
8	1	.2	.6
9	2	.3	1.4
10	1	.2	.8
11	1	.2	.8
	603		

Although state of origin made little difference in the size of outfit, the area in which the outfit worked was important. Custom cutters working on the high western plains, where farms were larger, themselves had larger outfits than harvesters farther east. Custom cutters entering Nebraska in 1969 through western ports of entry had more combines on the average than did those entering through eastern ports (See Figure 12). In both the west and the east the typical outfit was two machines, but in the west there were more outfits with

three or more machines, while in the east there were more with only one combine. The four ports farthest to the east had almost as many outfits with one combine as with two. Smaller outfits to the east were suitable for the smaller jobs found there; large outfits found sufficient work only where acreages were large.[11]

By the same logic it would have been expected that outfits in Montana would be larger than the average also, but this was not the case. Custom cutters in Montana in 1976 averaged only 2.1 combines apiece, mainly because there were so many custom cutters with only one combine. Probably custom outfits working in the northern plains averaged somewhat smaller than those farther south. In South Dakota in the same year, there were no records of the number of combines in each outfit, but custom cutters there averaged only 1.7 trucks apiece. Almost as many custom cutters had only one truck as had two, and no doubt some of the operators with two trucks had only one combine.[12]

However many combines custom cutters included in their outfits, they also had to make provisions to haul the grain they cut. In the earliest years of the industry many custom cutters did not do their own hauling. They either relied on the farmers they cut for to haul the grain or allied themselves with owners of trucks in working partnerships, the custom cutters receiving the revenues for combining, the truckers the charges for hauling. This kind of arrangement died out completely by the mid-1950s, and thereafter custom cutters included in their outfits about one grain truck for every combine.

The hauling capacity of the trucks increased with the cutting capacity of the combines through the years. Among custom cutters as a group there always were a few more trucks than combines, for a few

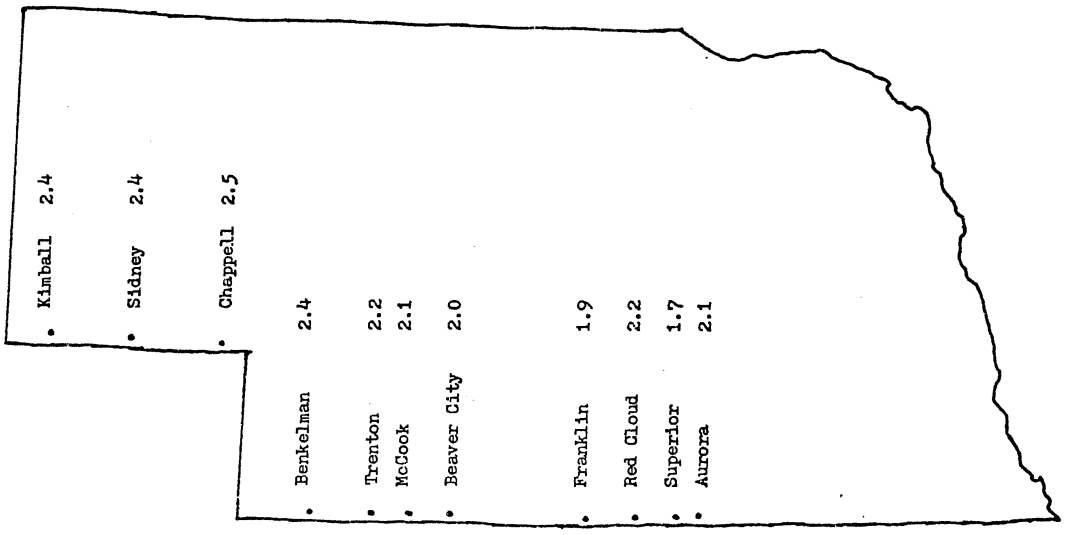


Figure 12. Average Number of Combines per Outfit at Ports of Entry in Nebraska, 1969

operators took one more truck than they had combines in order to keep up with the hauling more easily. 3,431 custom cutters surveyed in 1971 had 7,946 grain trucks, an average of 2.3 apiece, as compared to the average of 2.2 combines. Custom cutters in Montana in 1976 also had 2.3 grain trucks to the outfit, compared to 2.1 combines. Thus custom cutters in South Dakota in the same year, with only 1.7 trucks to the outfit, probably had even fewer combines to the outfit.[13]

Some custom cutters augmented their capacity for carrying grain with special equipment. A few took grain carts to be drawn behind tractors. These were used not to haul grain to the elevator, but to haul it in the field from the combines to the trucks. This was useful when soft ground or mud prevented the trucks from reaching the combines, but grain carts and tractors were too much trouble to transport for most operators. Others took pup trailers which they either hitched singly behind heavy grain trucks or coupled two at a time behind semi-tractor cabs. A few used semi-trailers or gravel trucks for hauling. All these methods were uncommon exceptions.

Custom cutters from the winter wheat regions who cut their way into the spring wheat regions took along pickup headers to handle windrowed grain. Thirty-eight custom cutters surveyed in 1977 owned 120 combines, but only 82 pickup headers.[14] Custom cutters who could arrange suitable routes without any pickup work did so. Not only were they averse to transporting pickup headers and putting them on the combines, but also harvesters accustomed to straight-cutting just disliked picking up grain from the windrow. They complained that farmers did not stay far enough ahead in the work of windrowing to keep them constantly employed, and they doubted that they could cover as

many acres of windrows as of standing grain. They complained loudest when they inadvertently picked up rocks or skunks in the windrow and ran them through the combine. On the other hand, custom cutters coming from the spring wheat region to harvest on the southern plains all had to buy sickle headers for straight-cutting.

Every custom outfit needed some sort of service vehicle containing equipment for maintenance. Usually this equipment was carried in a trailer, but often a one-ton truck or three-quarter-ton pickup served the purpose. In the 1940s a few custom cutters even used army surplus maintenance trucks. A well equipped custom outfit carried a welder, a cutting torch, and an air compressor in the service vehicle, as well as hand tools and grease guns. In boxes and cabinets were stored several thousand dollars' worth of parts and tires for the combines. 3,431 outfits in 1971 reported that they had 2,092 service trailers and 761 service trucks.[15]

Most custom cutters also considered pickup trucks necessities. They needed pickups for fast trips to and from and around the field. They also carried supplies of diesel fuel--gasoline in earlier years--in rectangular tanks mounted in the beds of the pickups up next to the cabs. They pumped fuel from these tanks to the combines with electric pumps powered by the pickup batteries, or in earlier years with hand pumps. In 1971 3,431 custom cutters reported that they used 3,052 pickup trucks. Custom cutters whose families accompanied them on the harvest also generally took automobiles. Thirty-nine custom cutters surveyed in 1977 traveled with 58 pickup trucks and 21 automobiles.[16]

Standard equipment for nearly all custom outfits by the late 1960s were two-way radios, sometimes business band but usually citizen's band.

Those who used business band radios rather than CBs did so because when a caravan of combines lined up on the road, the great amount of steel in the line interfered with communication by CB. Custom cutters in the 1970s equipped nearly every vehicle and combine with a CB. Thirty-seven custom cutters in 1977 reported that they used 307 two-way radios, 275 citizen's band and 32 business band.[17]

Individual custom cutters often took along additional equipment to suit their needs or fancies. Before the adoption of self-propelled combines, tractors accompanied each outfit. When tractors no longer were needed to draw combines, a few custom cutters continued to take them along to pull stuck vehicles from the mud. Occasionally a motorcycle would be seen strapped to a trailer. A handful of custom cutters used airplanes to scout jobs and to fetch parts. A plane parked in the stubble field among the combines and trucks made an incongruous sight.

Transporting all this equipment, especially the combines, sometimes taxed the resourcefulness of custom cutters. To transport the pull-type combines used in the 1940s down the highways, custom cutters first loaded the tractors into the beds of the grain trucks. Then they disconnected the headers from the combines and hitched the combines behind the grain trucks. Finally they loaded the headers onto trailers which they hitched behind the combines. Those custom cutters without trucks had to make their slow way north pulling their combines behind their tractors.

Early self-propelled combines fourteen feet or less in width could be loaded fully assembled onto the beds of grain trucks. This was a handy way to travel, but a risky one. The loaded truck was top-heavy and therefore dangerous in high winds, on inclines, or on curves. Pro-

truding headers atop the trucks were a fearsome sight to oncoming motorists. Signposts at the edge of the road sometimes fell victim to headers extending to the side, especially Massey-Harris headers, which were offset to the right. The bane of custom cutters traveling in this fashion was overpasses, which frequently swept protruding grain shafts from atop combines.

Headers wider than fourteen feet had to be detached and placed on trailers behind the trucks. In the 1960s, as weights and wheel bases of combines increased, it became too unwieldy and dangerous to load them onto trucks. Custom cutters then began to experiment with building trailers to hold the combines and loading the headers into the truck beds. Among the innovators were the members of the Jantz family of Moundridge, Kansas, who in 1967 abandoned custom cutting to form a company to manufacture combine trailers. Their chief competitor was Donahue Corporation of Donahue, Kansas, established about the same time.[18] Combine trailers, homemade or purchased, became standard equipment. Finally headers became too long to haul in truck beds, and so custom cutters began placing them on header trailers pulled behind pickups or service trucks.

Most custom cutters liked new machinery. There was a certain amount of pure vanity in the desires of harvesters to parade caravans of the latest models of combines and trucks down the main streets of the little towns they passed through. Beyond this there was the effect of appearing substantial and well equipped to potential customers. Farmers often chose harvesters by appearance, and they also had their vanity, for they wanted to hire a sharp-looking crew.

Some custom cutters adhered to regular schedules of how often to trade their combines and trucks for new ones, but most made these decisions by the nature of the times and the opportunity of the moment. Any time a favorable trade could be made was the time to make it. When business was good, as it was from 1973 to 1976, custom cutters traded more often. The Economic Research Service in 1971 found that custom cutters kept their combines for an average of 3.8 years before trading. The number of years of use varied inversely with the length of the harvesting season for the outfits. In Montana in 1976 77% of the combines used by custom cutters were 1974 models or newer. More than a third were 1976 models, and only about one in twenty was older than a 1970 model. Combines thus were of recent vintage, but it was not the policy of most custom cutters to trade every year.[19]

Custom cutters kept trucks longer before trading than they did combines because trucks were less subject to wear than combines. The average age of trucks in Montana in 1976 was 4.5 years, as compared to 2.6 years for combines. Only one truck in nine was a 1976 model. One 1949 model was in use. In South Dakota in 1976 the trucks were a bit older on the average, 5.0 years, but there was about the same proportion of 1976 models as in Montana. The same 1949 truck showed up in South Dakota.[20]

Custom cutters frequently argued the merits of various makes of combines, but they seldom changed each other's minds. Custom cutters generally owned combines all of the same make, and rarely did they switch brands after becoming accustomed to one. The custom cutter who learned to operate, service, and repair one make of combine was reluctant to switch to another, and besides, custom cutters tended to trade

with the same dealer repeatedly in order to be assured of fair dealing and good service. When Elmer Dirks of Buhler, Kansas, a custom cutter since 1947, switched from Massey-Ferguson combines to John Deere, it was an event notable enough to merit a story in John Deere's Furrow magazine with the heading, "The Switch Is On!" His son Keith, however, remained a Massey man.[21] In unguarded moments custom cutters admitted that the merits of the various makes of combines were close. Rarely was a significant improvement made by one implement company not soon adopted by the others.

After World War II and the Harvest Brigade Massey-Harris (Massey-Ferguson) had the advantage over other implement companies in sales to custom cutters with their self-propelled models. Gleaner-Baldwin and John Deere soon followed with successful self-propelled models. Gleaner-Baldwin, later to become a subsidiary of Allis-Chalmers Corporation, seemed to overtake the initial advantage of Massey-Harris among custom cutters in the 1950s. Custom cutters liked the compact frame of the Gleaner for hauling and disliked certain innovations made in Massey-Ferguson's design. In 1969 42% of the custom combines operating in Nebraska were Gleaners, 29% were Masseys, and 21% were John Deeres. The few remaining were distributed among makes which never captured a significant share of the custom cutters' market, like Case, International Harvester, and Oliver. Of the custom combines in Montana in 1976, 39% were Gleaners, 27% were Masseys, and 30% were John Deeres.[22]

Custom cutters stood to benefit when implement companies actively sought their business. Allis-Chalmers and Massey-Ferguson sent mobile units into the wheat belt during harvest to provide parts, repairs, and

counsel to custom cutters when they could not get them from local dealers. These units followed the harvest north and parked in towns where they were needed. Certain implement dealers, like Joe Vater of Enid, specialized in sales to custom cutters.[23]

Improvements in combines during the existence of the custom cutting industry were dramatic. Only about 2% of the custom combines in Nebraska in 1942 were self-propelled. Most of the rest of the combines, drag machines, had cutter bars of only eleven or twelve feet. A few were tiny power takeoff models designed for use in the Midwest.[24]

The first great change in combines for custom cutters was the transition from drag to self-propelled machines. This transition received a boost from the publicity accorded the Massey-Harris Self-propelled Harvest Brigade. Decades later old custom cutters still fondly remembered the Massey-Harris No. 21A and No. 27, but John Deere launched its self-propelled No. 55 in 1947, and other companies followed suit. During the early 1950s custom cutters rapidly replaced drag machines with self-propelled combines, which not only required less men to operate, but also were more convenient for traveling.

In succeeding years technological development of combines did nothing to change their basic principles, but combines became larger and more efficient. The first Massey-Harris self-propelled models had cutter bars of twelve or fourteen feet, but John Deere started out with a sixteen-foot model. Thereafter the increase in size proceeded slowly. By 1971 57% of all custom combines had headers of twenty feet, and 23% more had headers of eighteen feet. By 1977 twenty-four foot headers were the most common size, with twenty-foot nearly as popular. The implement companies fielded experimental models that cut thirty-foot swaths.[25]

Much additional improvement in combines resulted from the suggestions and complaints of custom cutters. Early self-propelled combines had tires so small that they quickly became mired in soft ground or mud, especially when the grain tanks were full. Custom cutters obtained used bomber tires from military surplus and enlarged their combine wheel frames to fit them, alleviating their problems with mud. A machine shop in Wichita, the air capitol, made this modification its specialty. Implement companies soon offered larger tires as standard equipment.[26] Custom cutters demanded combines built low enough to the ground to pass safely through highway underpasses. They wanted headers which could be detached and put back on quickly. They called for machines with better balance, more reliability, greater capacity, powerful engine, and variable transmission. All these improvements, when embraced by implement companies, benefited not only custom cutters but also farmers.

The greatest proof of the leading role played by custom cutters in improving combines was that each year the major implement companies placed their experimental model combines in the hands of professional custom cutters, where they would get the most grueling use. Engineers from the companies followed the experimental machines through the harvest not only to make necessary adjustments, but also to note how the combines might be modified to suit harvesters' needs.

Improvements and enlargements of grain trucks kept pace with development of combines. In the early 1940s most trucks were one- or one and one-half-ton Fords or Chevrolets. Most custom cutters recalled getting their first hydraulic lifts on their trucks around 1947 or 1948. The bed lengths and hauling capacities of the bobtail trucks used by

custom cutters increased until in the late 1960s they began to switch from single-axle to tandem-axle ("twin-screw") trucks. By the mid-1970s most custom outfits relied on tandem-axle trucks or a mixture of tandem-axle and single-axle trucks. Tandem-axle trucks had greater capacity, but some part-time farmers reasoned that ordinary bobtail trucks were more practical for general use around the farm.

Almost 70% of the trucks used by thirty-nine custom cutters surveyed in 1977 were tandem-axle or tri-axle models. Most had twenty-foot beds, and the average capacity was nearly 600 bushels. Single-axle trucks at the same time mostly had beds of sixteen feet, and their average capacity was about 350 bushels. Chevrolet trucks were the overwhelming favorite among custom cutters in 1976, at least those in Montana and South Dakota. About half the trucks used were Chevrolets, about a fifth were Fords, about an eighth were GMCs, and about a tenth were International Harvesters.[27]

Because machines and equipment were such an important part of custom cutters' operations, they lavished care upon them. Regular maintenance was part of the routine, and woe to the hand who failed to grease every zerk on the machine before starting up. Before loading up to move to another stop, custom cutters generally ran their outfits through coin-operated car washes. Ted Hardwick of Saxmon, Kansas, showed how meticulous a custom cutter could be about his equipment. During rainy spells his crewmen not only washed the combines, but also waxed them, a job that must have made them hope for good cutting weather again. Each morning the men hosed out the radiators on the combines and trucks with water and blew out the cabs with an air compressor. Hardwick insisted that no objects clutter the floorboards

of the trucks except water jugs. During the winter, when the combines were in storage, Hardwick put mothballs in the cabs.[28] Measures like these might have been expected to provoke discontent among workers, but such was not the case. Workers on most outfits tended to become attached to the particular machines they regularly operated. They sometimes gave them names and became fanatical about their care. Besides, those laborers who were paid by the hour were happy to log some hours cleaning up the machinery on rainy days.

Loving care of machinery was symbolically appropriate, for with each passing year custom cutting became more capital-intensive. With bigger and better machines--and more expensive ones--fewer men accomplished the same amount of work. In the days of drag combines, three workers were needed for each machine--one to drive the tractor, one to handle the combine, and the third to drive the truck. Self-propelled combines eliminated the need for a tractor driver. Then the increasing size of self-propelled combines gradually reduced the total number of combines needed, incidentally also reducing the total number of workers required.

In Nebraska in 1942, when nearly all custom combines were drag machines, outfits averaged about 2.7 men to each combine. Although some crews must have had extra men besides the three that would be expected with each combine, the average was less than three men to a combine, because some outfits still traveled without trucks. A few of the combines also were power takeoff models that required no man riding on the combine. Much later, in Nebraska in 1969, custom outfits averaged only 1.8 men to a combine. Self-propelled combines obviously had decreased the needs for laborers, but in addition, some outfits

apparently were operating with fewer truck drivers than they had trucks, letting the drivers shuttle the trucks from field to elevator.[29]

Such statistics presented only part of the story, for they considered only laborers in the field with the machines and not attendent workers such as cooks. After the first few years of the business, the cooking and housekeeping for custom outfits usually was done by wives and other members of the families of custom cutters. The Economic Research Service included these domestic workers from the family in its calculations to discover that custom crews in 1971 averaged about 2.2 workers to a combine. The same study showed that the larger the outfit, the easier it was to manage with fewer crewmen to the combine by cutting down on truck drivers.[30]

The survey in 1971 also illustrated the blend of hired labor and family members that went into the composition of custom crews. 16% of the outfits, most of them with one or two combines, used only the labor of family members in 1971. 17% of the outfits, generally among the largest, used only hired labor. The remainder used both. Among thirty-nine outfits surveyed in 1977, hired labor predominated, with 176 hired workers and 105 family members manning the crews. There were more hired workers than family members working on all sizes of outfits.[31]

Although hired men outnumbered family members in the ranks of harvesters, the family members were a peculiar and important part of the crews. They constituted cheap labor that did not have to be recruited, without which many custom cutters could not operate. It certainly would have been too expensive for most custom cutters to hire full-time cooks, but wives served admirably, and the price was right. Family members also were more devoted to the work at hand, because

custom cutting was the business of the entire family. In this way custom cutting was similar to its host industry, farming.

Obtaining enough good hired workers always was a concern of custom cutters. During World War II custom cutters had to hire whomever they could find, and at least according to their accounts, they ended up with far too many drunks and deadbeats. Crewmen of this time also were conspicuous for their age. Men who otherwise might have been considered retired went on the harvest during that time of emergency, attracted by rising wages. Immediately after the war there were more men of all ages available for employment, but custom cutters found that they had to choose between older men and younger ones and hire all of one or the other. With some exceptions, older men and teenagers got along poorly in the same crew. Custom cutters therefore chose youthful enthusiasm over wizened experience. From the 1950s on custom cutters tended more and more to hire young men in their teens or early twenties, most often students working through the summer. If they were inexperienced, they also were quick to learn. The great disadvantage in hiring students was that they returned to school in September. Custom cutters working through the fall therefore generally curtailed their operations, operating with fewer machines in the fall harvest. If possible they recruited additional workers from the local population where they were working.

Custom cutters usually hired workers from their own localities, from families they knew personally. They especially hoped to seduce farm boys who were familiar with harvesting machinery into making the harvest with them. Most custom cutters had no formal process for interviewing workers or weighing their qualifications. Only the most

meticulous took written applications for work. One who did sent each applicant a statement about custom combining in order to help the prospective employee decide whether the job was for him or not. "This is quite a different type of work than most jobs," he asserted in a masterpiece of understatement. The questions he then asked of applicants were designed to weed out any potential sources of difficulty. Inquiries dealt with smoking, drinking, drugs, allergies, and criminal records. Then there was the pivotal question, "Do you like to work around machinery, cars and motors?"[32]

Custom cutters with sons in high school or college often used them to screen or recommend employees. Other custom cutters advertised for help in agricultural periodicals, regional newspapers, or college campus newspapers. The advertiser might seek a certain type of employee by advertising in a particular publication. Some Mennonite custom cutters from Kansas advertised for help in denominational magazines, thereby recruiting many farm boys from Pennsylvania eager for a summer on the plains.

When custom cutters during the later years were asked what the greatest problem of their business was, they almost invariably answered, "getting good help." This was partly the result of general changes in society. There were fewer farmers, and thus fewer farm youths experienced with machinery to recruit. Youths from more affluent families were reluctant to take such strenuous work for the summer.

Yet the problem of "getting good help" arose primarily from the rising expectations of custom cutters themselves. Certainly the laborers available in the early years of the industry were less than choice, but then there were fewer complaints about their fitness.

However, it was one thing to put an inexperienced hand on a $4,000 combine and take a chance that he might do something foolish, and quite another to put the same novice on a $40,000 machine. The spiraling cost of machinery made it increasingly important that workers be knowledgeable and responsible. Custom cutters became less tolerant of learning by trial and error. Inexperienced hands received stern lectures on proper operation of equipment and were broken into the job under careful supervision.

Most of the hired youths who made up custom combine crews were students who needed money to stake another year in school. College students were the favored workers, but high school students were equally numerous, some of them as young as fifteen or sixteen. Most of the workers who were not students nevertheless were similar to them in that they were young and they worked the harvest for only a brief period. For most all of the workers, custom cutting for a summer was a brief encounter with an interesting business, but little more than that. It furnished them with a little bit of money and a great store of anecdotes, but then they went on with their lives as usual.

If the deck of hired hands was largely of the same suit, there were enough wild cards to make the game interesting. Among them might be found the likes of a fellow from Michigan working the harvest to make money to buy farmland at his home, where he and his wife planned one day to own "the biggest damn farm in northern Michigan." Another was the son of the owner of a jeans factory in Lexington, Kentucky, and a senior at the University of Kentucky. His father had made the harvest decades earlier with an outfit from Oklahoma and wanted his son to have the same experience, "to make a man of him." The son was

working for the same family of custom cutters that his father had. There was even a youth released from reform school into the custody of a custom cutter to keep him busy for the summer.

Wages for hired hands never were princely, but because of the terms of employment and the type of work, laborers had the chance to save a good stake from a summer's work. The employers provided room and board, and so what wages the men made were pure profit, except for some small personal expenses. If the idleness of too many rainy days did not tempt the men to frivolous spending, they could save most of the money they made.

No agency made any comprehensive record of wages paid to workers in custom outfits from year to year. In 1948 the most common wage was about a dollar an hour. Since most custom cutters also were farmers, wages on the harvest probably were comparable to those for other types of agricultural labor. Reports from custom harvesters in 1977 indicated that wages varied both in terms of payment and in amounts paid. The most common method of payment was a monthly wage. The monthly stipend varied greatly both among and within outfits, from about $450 to $1,500. About $700 seemed to be the usual monthly wage, but experience and age made great differences in the wages of workers. An inexperienced high school student could not expect top wages; he not only contributed less to the outfit,but also took up the time of other members who had to teach him the ropes. On the other hand, some workers, usually older men, not students, were of such value that they commanded premiums. They had years of experience and were skilled mechanics. Several custom cutters reported paying a weekly wage of $130 or so instead of a monthly wage. One offered $1,250 for the entire harvesting season, in his case about two months.[33]

Monthly, weekly, or seasonal wages had good and bad points. If the weather was good throughout the season, then these arrangements worked to the benefit of the employers. No matter how many consecutive days the men worked, or how long the hours were, wages remained the same. If there were long spells of wet weather, then the workers benefited. They received the same pay whether they worked in the field or played cards in the trailer.

Other custom cutters instead paid their men by the hour. In these cases the conservative employer was assured that he would not have to pay for men who were idle. Some ambitious crewmen also preferred this arrangement, for they hoped that the weather would remain good and they would log long hours. Hourly wages in 1977 generally were about $3.00 or $3.50 for most young hands, with better rates for experienced men. In some cases, custom cutters gave their employees double assurance of fair returns: they stipulated payment by the hour, but with the provision that should the crew be idle too much, then the men still would receive a set amount each week or month. One custom cutter even worked out a plan replacing wages with shares of the outfit's revenues, granting each worker three to five percent of the gross income of the outfit. Most custom cutters paid a bonus to hands who lasted the whole season.[34]

Wages paid to laborers were one of many expenses that custom cutters balanced against revenues. Expenses for custom cutters increased gradually through the years until the 1970s, when they spurted upward. From 1948 on custom cutters fought the tightening grip of rising expenses and sliding revenues. Except perhaps in the first few years of the business, the most common size of outfit on the road

was two combines. For such an enterprise profits declined through most of the history of custom cutting, but for an established operation with secure jobs to fill the season, decent returns were possible.

Twenty-three operators of custom outfits with two combines each in western Oklahoma in 1948 supplied information on their expenses. The average number of acres they intended to cut in a season was 3,701 for each outfit. This estimate was for wheat only. If they cut the number of acres they intended to and received the going rate of the times for their work, $3.50, then the average income for base charges should have been almost $13,000 to an outfit. Assuming that the wheat cut yielded twenty bushels to the acre, then hauling charges figured at five cents a bushel boosted the average income of the outfits by about $3,700. Allowing a bit more income for charges for high yields, custom cutters with two combines should have expected an average gross income in the neighborhood of $17,000.

Against this income were pitted a variety of expenses. The study of 1948 recorded only expenses related to combining grain and not to hauling it. Custom cutters estimated their seasonal expenses for moving from stop to stop, as well as their expenses in the field for such items as repairs, gasoline, oil, and grease. Custom cutters supplied estimates of the amount they paid for labor, and labor by members of the family was figured at a dollar an hour. Costs for depreciation of combines and interest on capital invested were included, the average investment in an outfit totaling $14,275. All told the expenses considered averaged $7,557 a season for an outfit with two combines, or $2.04 for each acre cut. The costs for trucking would have added to this total considerably. Costs for labor and gasoline in

trucking should have been about equal to those figured for combining, while other expenses for trucking would have been lower than those for combining. A good estimate for the average costs of trucking might have been that they about equaled the income for hauling, $3,700. This would have meant total expenses for an outfit of two combines of more than $11,000, to be subtracted from gross income of about $17,000.[35]

A net return of nearly $6,000 for a summer's work in 1948 was impressive, especially considering that the costs figured for the labor of family members would not have been paid out. Some custom cutters also must have supplemented what they made from the wheat harvest with additional work in the fall harvest. If custom cutters cut the acreage that they estimated they would in 1948, they earned fine profits. The problem for the business as a whole in 1948 and for years thereafter was that too little work was available for most outfits to cut 3,700 acres in a season. The high returns possible if work could be found, however, explained why it was hard for the business to adjust to a reduced demand for harvesting after 1948. Marginal custom cutters knew that profits were possible if only they could obtain work.

Information on earnings and costs of custom cutters gathered by the Economic Research Service in 1972 permitted some comparison with earlier conditions, although revenues and expenses were calculated in different ways than in the study of 1948. Researchers obtained business records for 1972 from a number of custom outfits, including ten with two combines each, still the most common size of outfit. The study found that the ten outfits cut an average of 4,146 acres of all crops for the year. Most of this, 3,250 acres, was wheat, and other small

grains accounted for 339 acres. The only other crop with a large share of the average was milo, with 482 acres. Acreages of corn and other crops were much lower. The study recorded the rates obtained for all cutting, which for small grains usually were three-fifty, five, and five or four, five, and five. The average gross income for outfits with two combines was $24,443--$17,089 in base charges for combining, $5,707 for hauling, $1,059 for high yields, and $588 for miscellaneous income. This was a gross income of $5.86 for each acre cut.

Only cash expenses were considered in the study. No amounts were figured for depreciation of machinery, interest on investment, or value of family labor. Cash expenses for outfits with two combines averaged $11,518--$3,096 for wages, $2,426 for fuel, oil, and grease, $2,314 for parts and service, and $3,682 for other expenses, including food, lodging, taxes, insurance, interest, and other small expenses. Expenses figured out to $3.36 an acre. The average net return over cash expenses was $12,925 for the season, or $2.50 an acre.[36]

Profits for custom cutting in 1972 were less satisfactory than those in 1948. Gross income increased by nearly fifty percent, but that was too little to compensate for the declining value of the dollar, let alone to offset increased expenses. The returns above cash expenses generally represented the reward for the work of an entire family through the season, work demanding long hours and constant travel. The outfits also contributed an average of $37,804 in capital invested in equipment which depreciated rapidly.

Yet considering all this, there was enough possibility of profit to explain why custom cutting had endured through the years. For most custom cutters custom harvesting was just part of an operation which

also included farming, and so it should not have been expected to provide net income commensurate to that expected of a full year's enterprise. Equipment used in custom harvesting also was used at home on the farm, and part of the expense of maintaining the outfit therefore should have been charged against the farm rather than the custom outfit. The portion of the returns above cash expenses realized as net profit by any custom cutter depended on his own financial skills, but the spread between gross income and cash expenses was enough to permit the survival of the business.

The economic development of custom combining from 1973 to 1976, stimulated by the rapid rise in the price of wheat, was so sudden and chaotic as almost to defy measurement. There were no comprehensive studies of the rises in income and expenses during this time, but both were obvious. Rates charged for combining more than doubled at the same time that the amount of wheat available for harvesting increased, and so gross income skyrocketed. Expenses spurted also, however. A spot survey of certain major items of expense in 1977 made this plain. Thirteen operators of outfits with two combines each said that they expected to pay total wages of $6,350 to an outfit, more than double the amount for wages reported by outfits of the same size in 1972. Rises in costs for fuel were even more striking, as custom cutters in 1977 expected to consume an average value of $6,207 in fuel, nearly three times what they spent in 1972. Prices for the models of combines designed for the wheat belt advanced from about $15,000 to $35,000 or $40,000.

Just how far gross income outstripped rising expenses was unknown, but custom cutters certainly enjoyed unprecedented prosperity. They

invested much of their new-found wealth in new and larger machinery, which in turn helped them to cover more acres. The average number of acres covered by outfits with two combines in 1977, according to custom cutters' expectations, was 6,087--5,222 acres of wheat, 444 acres of milo, and 421 acres of other crops.[37]

The meaning of the harvest of 1977 was unclear, for custom cutters themselves were not sure how it would affect their profits. Most ventured opinions that both rates and demand for cutting would decrease. The decreases that occurred were small, however, and for most custom cutters with established routes the harvest of 1977 was business as usual. Probably it was concern for the future that inspired most of the fears of custom cutters at this time. They had seen by previous experience that as long as the price of wheat remained low, they had little chance of passing along their increased expenses to farmers. They had been unable to do so from 1948 to 1972. In 1977 the market for wheat had been shattered, and there was no hope in sight of any relief.

If historical precedent was any indication, then what custom cutters faced in 1977 and following years was not a sudden drop in rates for cutting, but a reduction in the amount of work available. This was not likely to cause as much hardship as it had in decades earlier, for in the 1970s expansion had come with the enlargement of existing outfits more than with the addition of new ones, and so custom cutters should have been able to survive contractions of demand by sticking with their regular customers. What custom cutters could expect was a gradual belt-tightening. Expenses could not continue to rise as they had for the past few years, because the agricultural economy was not flourishing enough to support them, but they would creep upward. Meanwhile, with

farmers facing hard times, custom cutters would be locked into a schedule of rates for cutting that would not change until better times returned for farmers.

All things considered, the signs favored the survival of the business of custom combining as an important force in the agricultural economy of the plains. The principal reason was that custom cutters had fashioned and honed the techniques of management by which they operated during the decades of hard times before the boom of the 1970s. Methods might have become lax and careless during flush times, especially in the overextension of finances, but more trying conditions again would forge them into effective techniques for survival.

FOOTNOTES

[1]Comments enclosed with questionaires returned to author by custom combiners.

[2]Questionaires returned to author.

[3]Fischer, "Custom Wheat Harvesting in the Economy of Western Oklahoma," pp. 30-31.

[4]Averages calculated from data in Lagrone and Gavett, Interstate Custom Combining in the Great Plains in 1971, p. 4.

[5]Questionaires returned to author.

[6]Hecht, Transient Combine-Harvester-Threshers in the Great Plains, 1942; Fischer, "Custom Wheat Harvesting in the Economy of Western Oklahoma," pp. 15-16.

[7]Register of weed inspections, 1969, Nebraska State Department of Agriculture.

[8]Lagrone and Gavett, Interstate Custom Combining in the Great Plains in 1971, p. 4.

[9]Information compiled from report supplied by Epic Research, Inc.

[10]Register of weed inspections, 1969, Nebraska State Department of Agriculture; Lagrone and Gavett, Interstate Custom Combining in the Great Plains in 1971, p. 5; information compiled from report supplied by Epic Research, Inc.

[11]Register of weed inspections, 1969, Nebraska State Department of Agriculture.

[12]Information compiled from report supplied by Epic Research, Inc.; records of Custom Combiners Permits, 1976, South Dakota Department of Public Safety.

[13]Lagrone and Gavett, Interstate Custom Combining in the Great Plains in 1971, p. 11; information compiled from report supplied by Epic Research, Inc.; records of Custom Combiners Permits, 1976, South Dakota Department of Public Safety.

[14]Questionaires returned to author.

[15]Lagrone and Gavett, Interstate Custom Combining in the Great Plains in 1971, pp. 3, 12-13.

[16]Ibid., p. 11; questionaires returned to author.

[17]Questionaires returned to author.

[18]Personal interview, Melvin Jantz, Moundridge, Kansas, March 18, 1977.

[19]Lagrone and Gavett, Interstate Custom Combining in the Great Plains in 1971, p. 22; information compiled from report supplied by Epic Research, Inc.

[20]Information compiled from report supplied by Epic Research, Inc.; records of Custom Combiners Permits, 1976, South Dakota Department of Public Safety.

[21]Personal interview, Elmer Dirks and Keith Dirks, Buhler, Kansas, December 28, 1976.

[22]Register of weed inspections, 1969, Nebraska State Department of Agriculture; information compiled from report supplied by Epic Research, Inc.

[23]Allis-Chalmers Company and Massey-Ferguson, Inc., annually published brochures outlining the routes of their mobile units.

[24]Hecht, Transient Combine-Harvester-Threshers in the Great Plains, 1942.

[25]Lagrone and Gavett, Interstate Custom Combining in the Great Plains in 1971, p. 10; questionaires returned to author.

[26]Personal interview, Henry Oldham, Blackwell, Oklahoma, December 15, 1976.

[27]Questionaires returned to author.

[28]Personal interview, Ted Hardwick.

[29]Hecht, Transient Combine-Harvester-Threshers in the Great Plains, 1942; register of weed inspections, 1969, Nebraska State Department of Agriculture.

[30]Lagrone and Gavett, Interstate Custom Combining in the Great Plains in 1971, p. 20.

[31]Ibid., p. 23.

[32]Application and comments enclosed with questionaire returned to author.

[33]Questionaire returned to author.

[34]Ibid.

[35]Fischer, "Custom Wheat Harvesting in the Economy of Western Oklahoma," pp. 38-73, appendix Table II.

[36]William F. Lagrone and Charles C. Micheel, Income and Expenses of Interstate Custom Combiners (Washington, D. C.: Economic Research Service, United States Department of Agriculture, 1975), pp. 5, 14-15.

[37]Questionaires returned to author.

CHAPTER VI

AN UNUSUAL SORT OF LIFE

The harvest of 1947 was a trying one for Alan Ladd, custom cutter. Not only was he in debt to the straw-spreaders, like most custom combiners, but he also faced every trouble that the script-writers of Hollywood could imagine. Wheat fires raged out of control. Crewmen staged brannigans with rival outfits. Worst of all was the disruptive influence of Dorothy Lamour, who corrupted crack mechanic Robert Preston into such distressing activities as marriage and, worse yet, bootlegging farmers' wheat at elevators. It took the powerful fists of Ladd to restore poor Preston to his senses and get the outfit back on the road north. The harvest was filled with adventure, conflict, and wild women in those days--at least as portrayed in the motion picture, Wild Harvest, by Paramount Pictures.

The harvest in truth had its share of inherent romance, but that was only a part of the lives of custom cutters. Wild Harvest and scores of feature articles in newspapers and magazines repeatedly captured the color of the business. Again and again appeared the same photographs of as many as twenty combines attacking fields in close, sawtooth formation--an arrangement practical for photographers, but dusty and dangerous for combines and drivers. In daily life the romance of the harvest was tempered by hard work and weary spirits. "It certainly is not a bed of roses, although a lot of people think

that it is," one custom cutter summed it up.[1] Yet if custom combining was not undiluted high adventure, it nevertheless offered its participants a unique style of life little understood by outsiders.

Perhaps the most peculiar aspect of life in the harvest was the social arrangement it created, a blending of the ties of family with the relationships of business. In every outfit there was a ramrod, a boss, or whatever the men chose to call him. Here was a man who played many roles. In most cases he was first of all a husband and father. The presence of his family with him placed responsibilities on the boss that a crew of men did not. If food, accommodations, and cleanliness were not the best, a boss could tell hired men to take it or leave it, but he had to take special pains to see to the comfort of his family. At the same time the boss was responsible for a crew of men who needed careful supervision. In other businesses it was possible for an individual to be one man, a gentle father, with his family and another, a tough taskmaster, with his employees, but for custom cutters family and business were fused. Especially this was true when the boss's own sons worked for him. So most custom cutters adopted a paternal attitude toward their workers, although they recognized that too much familiarity could lead to laxness. Rather than treating their sons as hired men, they treated their hired men as sons, that is if they were the age of students.

Outsiders expected custom cutters to be a tough, profane lot. This was generally true of single custom cutters or those who traveled without their families, but custom cutters whose families accompanied them deported themselves differently. In fact most professional custom cutters were downright soft-spoken. Either they mellowed with the

years, or the countless crises of harvesting winnowed out the most excitable ones, leaving only those able to look on plugged cylinders and busted sickles with equilibrium.

Some bosses were exceptions to this principle, for each one had his own style. In custom combining it was not enough to direct workers to the tasks to be done. It took leadership to inspire them to stay at the job after midnight of a sixteen-hour day. Some accomplished this by quiet example, but others did it by creating an atmosphere of awe. Before the advent of two-way radios among custom cutters, this sort of boss needed a powerful set of lungs to shout reprimands across the wheat. A gruff front shown to employees and sons alike helped to dissipate talk of favoritism and even could be a stimulus to esprit de corps.

The role of the outfit's ramrod was that of a patriarch, ruling over household, retainers, and possessions. This pushed the boss's wife into assuming the role of a matriarch as much as she was willing to do so. She was not only wife and mother to her own family, but also temporary mother to a crew of young men.

How maternal the wife was to the crew was a function of her personality, the age of the workers, and the conditions of the moment. Almost universally she cooked for the crew, but beyond that generalizations were hard. There was a tendency when the work was slow for her to let the boys go their own way and look after themselves. When the work was hard, when the boys had worked long hours for many days and were tired, sympathy got the upper hand. Whereas the men were expected to do their own laundry when there was time, when they were too busy she was likely to make a sweep through the bunkhouse and haul a load of

clothes to the laundry or do necessary mending. Meals became more substantial, and at end of day--sometime after midnight--there was likely to be some sort of pastry for a snack. During hard stretches of work the harvesting wife visited the field more often and stayed longer when delivering meals.

Children of the boss had privileged positions, not in the amount of work expected of them, but in status. Sons were not just workers, they were heirs, expected to assume more and more responsibility in managing the outfit as they grew older. They were more likely to choose their jobs rather than have them assigned. Daughters shaped their roles to suit their preferences. Some chose to operate combines or trucks, others were happy to decline, while still others joined in the field work only when necessary. Young children led a Sawyer's life, seeing a succession of new towns and places, taking the wheel of the combine for a round, moving as they pleased through the masculine society of the harvest.

Among the hired men there developed a set of roles that was not exactly a pecking order, but was certainly a sense of each man knowing his place. The job of combine driver was a bit more prestigous than that of truck driver. Combine driving took more skill with the controls, and the item of machinery was more vulnerable and more valuable than a truck. Combine drivers liked their job because they were responsible for nothing else but running their machines. Their duties were clear. Some workers preferred to drive a truck for the sake of variety of tasks. Truck driving meant frequent trips to town, or at least to an elevator, and truck drivers also were expected to pitch in on any odd job that had to be done when not actually driving. Combine

drivers and truck drivers had to be prepared to trade jobs if necessary. Some bosses made it a practice to rotate the jobs, while others just wanted their truck drivers to be able to run a combine for a few minutes while the combine driver ate a meal.

Further specialization also developed, especially in large crews. It soon became known which hands had special skills--knowledge of wiring, expertise in engines, ability to weld, or just a strong arm for budging a clogged cylinder. From any crew emerged a top hand or two who did more than his share of the work. He was the one who pitched in to help whenever there was a breakdown and to whom others turned when the boss was absent and they needed advice. It was possible for a laborer to get by doing only his bare share of the work, but he was soon known to his fellows. Truck drivers, when asked to, willingly pointed out the best combine driver on the crew; combine drivers knew just as well what truck drivers were most reliable.

Foremen were scarce in custom cutting, but a few crews had them. They were hired for one of two reasons. The first was that the boss was retired or easing into retirement and had no son or successor taking over the operation. The foreman in this case either was a junior partner or hoped to become one. The boss then confined his duties to negotiations with customers and matters of finance, plus such questions as when to move from one area to another. The foreman supervised the work in the field. The other possible reason for having a foreman was that the outfit was large enough that it sometimes split up to work on more than one job at once. Then a foreman handled one portion of the outfit, the boss the other. The foreman in either case was expected to be much more than a supervisor. He also was a skilled mechanic, hired as much for that skill as for any other reason.

For all members of the outfit, the quality of life on the road improved greatly through the years. Housing was an obvious concern. During the early years of the business few custom cutters took their families along on the harvest, and the hired men enjoyed little personal comfort. Of the custom outfits in Nebraska in 1942, less than one in twenty had any sort of trailer or bus for sleeping. This meant that pioneering custom cutters relied on local accommodations, and during the harvest, hotels soon filled up. Farmers provided some lodgings, but too often the harvesters had to shift for themselves, sleeping in their trucks, in granaries, or under tarpaulins. A few custom cutters carried tents for lodging.

Later in the 1940s house trailers became common in custom outfits, for more custom cutters began taking their families along on the harvest. Early house trailers varied greatly in quality. Some were commercially manufactured, while others were homemade frames with aluminum or steel sheeting tacked on. The first house trailers appeared as lodgings for the boss and his family, with crewmen still sleeping wherever there was shelter, but soon custom cutters began to include additional trailers as bunkhouses. Some of these were army surplus troop carriers during the late 1940s. By 1971 most custom outfits had house trailers, and many also had campers or buses for the hired men. 3,431 custom outfits boasted 2,296 house trailers and 793 campers or buses. Many custom cutters, those with short routes who did not take their families with them, still relied on local accommodations.[2]

The addition of a house trailer to an outfit did not necessarily make life luxurious. Mable Squires recalled that when she began making the harvest with her husband, Everett, in 1948, he always parked their

trailer in the field, rather than in town or at the farmyard. This was to keep rowdy crewmen away from any place where they could find trouble.[3] Mobile home parks were still a thing of the future in the early days, and so hookups for electricity and plumbing often were unavailable. The proliferation of house trailers among custom cutters itself raised problems. Trailer parks handled some of the traffic, but parking spaces were at a premium in the tiny towns frequented by custom cutters. Alleys and vacant lots, fairgrounds and football fields, even parks and courthouse squares became haunts for harvesters.

By the 1970s professional custom cutters lived in some comfort. They established regular parking places for each year at each stop on the route and reserved their spaces well in advance. Their trailers were filled with the same conveniences they enjoyed at home--modern kitchens, air conditioning, comfortable beds, and television sets.

A great problem of early custom cutters was obtaining meals substantial enough for men working long hours. Cafes, like hotels, were jammed during harvest, and custom cutters could not afford to wait long to be served. Lines of hungry harvesters stretched out of the doors of diners into the streets. All too often during World War II cafes closed their doors because they ran out of food, especially meat. Those custom cutters who turned to grocery stores in hopes of cooking for themselves found shortages there also. Everett Squires recalled being desperate enough in such a situation in Tribune, Kansas, during the war that he and his men pursued cows in pastures for milk.[4] Even if enough groceries were available, some member of the crew had to rise early to cook breakfast and retire late after finishing the dishes. Lunch for early custom cutters was a sandwich eaten on the run.

Occasionally there was relief from such difficulties. Women in the towns sometimes opened special kitchens to serve harvesters during the war, much as they did for soldiers. Custom cutters held ample shares of rationing coupons which they turned over to the women serving them.

The addition of a woman to an outfit was a godsend from the standpoint of nutrition. This meant palatable meals at last, often cooked on kerosene burners or on the ground. Once harvesting wives acquired modern kitchens, they turned out meals probably better and certainly bigger than what the men had at home. The usual practice was to serve breakfast in the trailer and to take a noon meal (dinner, not lunch) and an evening meal (supper, not dinner) to the field. Some bosses insisted that dinner be a smaller meal than the rest, lest the largess of the cooks slow their men down on warm, sleepy afternoons. Casseroles figured largely on the menu because of the number of men to be served, but steaks were not unknown, while hamburgers were a staple in dinners carried to the field.

Even laundry and bathing were problems for early custom cutters. Coin-operated laundries were rare in the 1940s in the areas where custom cutters operated, and cleaners could not handle the volume of work presented them during harvest. Clothes therefore were washed only occasionally. Baths were even rarer occurrences, unless stock tanks were handy.

For some years Mable Squires did the laundry of her husband and all the hired men on a scrubboard, but harvest hands then and later usually were expected to do their own washing. The best-hated memories of many hired hands were of folding laundry in a laundromat after a long day's work in the field. Laundry usually was a task for rainy days, but sometimes the rainy days were too far between.

With their busy schedule, the social life of custom cutters was limited during harvest. Of the men of the outfit, the person who had the most contact with outsiders was the boss, and this consisted almost entirely of business. He negotiated with farmers, talked with elevator operators, fetched parts from implement dealers, bought fuel at filling stations, and exchanged information with fellow custom cutters. His conversations with all these people were brief, unless it was too wet to cut.

Women and children not engaged in field work drew their acquaintances almost entirely from the families of other custom cutters and the families of farmers their outfits cut for. In towns on the high plains the house trailers of custom cutters formed villages in the areas where they were accustomed to park, making social contact convenient. Visits among the women were common in the afternoon, and children had playmates. Also there were calls to make on the wives of farmers, women who became good frieds in the course of many years working for the same people.

Flava Bever of Cedar Vale, Kansas, was the wife of custom cutter Alpha "Hap" Bever. Throughout the 1950s she kept a daily diary recording her activities and travels across Oklahoma, Kansas, Colorado, Nebraska, South Dakota, and North Dakota. Her social schedule, while not refined, nevertheless was full. Rarely did a day go by in which she did not visit some local woman. Usually this was to do some work--washing clothes, plucking chickens, making quilts, canning pickles, and even picking chokecherries and making jelly in South Dakota. Ladies in North Dakota, three states away from her home, arranged a coffee for her on her fiftieth birthday. Her teenage daughter enjoyed swimming,

movies, dances, horseback riding, and stock car races at various times on the road. When storms threatened, they took refuge in cellars with farmers' families. Flava Bever reveled in the constant activity. For some other women of the harvest, the social life expected of them could become a burden. Visiting around by the women was one way that enduring relationships with farm families--customers--were solidified.[5]

The social world of the hired men on a custom crew consisted mostly of each other. They had little opportunity to meet men from other crews except briefly at elevators or sometimes on rainy days. If the weather was bad they might take in local bars, but usually they found themselves in such small towns that the night life amounted to little and ended early in the evening. The love lives of harvest hands in no way resembled that of Robert Preston in Wild Harvest, as was well said by a hulking bulldogger turned truck driver from west Texas. Approaching an elevator in Vernon, Texas, with a truckload of wheat, and spying two girls on the sidewalk, he let go a blast of the air horn, turned, and said, "That's about as close as we get."[6]

The lack of amusement for harvesters seldom was a problem, for if the weather was good, they had no time for recreation anyway. Footballs, playing cards, and occasional guitars saw the light on idle days. The most interesting aspect of the summer's stint in the harvest was the country itself. Custom cutting was the finest lesson in geography most youths ever had, for it forced them to live and work in a series of locales, not just pass through them. Occasional opportunities arose for sightseeing. The Squires outfit always took one day off to attend the Frontier Days in Cheyenne, Wyoming, the men riding in from western Nebraska in the back of a pickup. Flava Bever found time to visit

the Black Hills, the Badlands, the Great Salt Plains of Oklahoma, and the zoo in Garden City, Kansas.[7]

Such diversions were welcome, for the grind of work often was severe. The first person up and about in the morning was the boss's wife, along with any other woman in the outfit who cooked. She began preparation of breakfast, which on a working day was a large meal. In western parts of the plains she had to have breakfast ready by seven or so, for the light dew meant that cutting might start around nine. Farther east harvesters stirred a little later in the morning, for it took time for the wheat to dry out anyway.

Next to rise was the boss himself, waking at the same time as his wife, but taking longer to dress and get out. He made his way through the kitchen, checking on the progress of breakfast, and stepped outside to put on his boots. By that time it was time to call the men from the sleeper. The smell of bacon frying was scarcely enough to rouse them, but a knock and a shout was, allowing a few minutes for the words to take effect. Breakfast followed as soon as the men showed up. It was the least hurried meal of the day, and the only one at which the entire crew came together to eat.

All this took place in the midst of a trailer park or harvesters' camp in which other outfits were doing the same. Soon the men came streaming out of the trailers and piled into pickups and trucks. This was the time for horseplay by young hands if there was to be any, for later everyone was too busy. The trucks took to country roads, while back in the trailer, the women cleared away dishes. As soon as the dishes were washing or done, they began preparing dinner. Morning offered the women little time for relaxation.

Arriving at the field, where the combines and the trucks had stood through the night, the men began the ritual known as "servicing the machines" or else as "gassing up" and "greasing up." Each man took care of the machine he was to operate. Truck drivers checked motor oil, hydraulic oil, water, and tires and placed water jugs they had filled at the trailer in the truck cabs. Finishing their tasks, they came over to help the combine drivers gas up. Someone drove the pickup with the gas tank to each combine in succession. The combine drivers continued greasing up, leaving no zerk untouched. Sensitive joints, like the one connecting the pitman bar to the sickle, would be greased again later in the day.

If all was ready before the wheat was dry enough to cut, then the men waited for the boss's word to begin cutting. The boss was concerned about the moisture test in the morning. He carried a moisture testing device with him or else carried samples to the elevator for testing. Elevators generally docked for grain testing more than 14% moisture, but farmers often said to go ahead and cut if the wheat was less than 16% moisture. Usually the boss could tell if the wheat was dry enough to cut without a test, just by chewing a bit of grain or rubbing some out in his hand.

When it was time, the combines cleared their throats with belches of black diesel smoke. They moved forward rapidly, slowing as they neared the wheat, the drivers engaging the cylinders and reels and lowering the headers to begin work. Truck drivers relaxed for a while. It took some time for the combines to fill their grain tanks. Conversations were struck up on the CB, mainly about conditions of the field and instructions of where to haul the wheat.

When a combine's tank was nearly full, the driver signaled for a truck to come and dump him. This was easily done with a CB, but in earlier times it would have been with flashing lights or waving arms. A truck then left the edge of the field and pulled alongside the moving combine. If the ground was dry, the combine might "dump on the go," pouring the grain from the augur into the bed of the truck moving alongside. The combine driver might instead stop to dump, especially if he needed to get a drink from the water jug or to make some mechanical adjustment. If the field was muddy, then the truck drivers did not try to go to the combines to dump, but waited for the combines to come to the edge of the field.

Several dumps made a truckload ready to go to the elevator. During the last dump the truck driver climbed into the bed of the truck to even out the load of grain with a hand scoop, "leveling it off." Then he began "tarping down," kneeling in the grain at the front of the bed to untie the tarpaulin fixed there and unroll it to the back, covering the grain. Dropping to earth, he secured the edges of the tarp to hooks or bars on the sideboards with a rope strung through eyeholes on the tarp's edge or with rubber straps with hooks on either end. Then he got in the truck and roared in low gear across the field to the road. In rural areas where custom cutters operated, the driving of harvesters hauling grain was notorious. Each trip was a race to the elevator before some other trucker claimed the next place in line to dump. Speeds were as fast as loaded trucks would make, and with trucks burdened with more than the legal limit, it was hard to be conscientious about stop signs. The only stop the truck driver wanted to make was on the scales at the elevator, or in the line leading to the scales.

At the elevator the driver waited his turn, then wheeled onto the scales. An attendent emerged from the scales-house, usually a small white building with a large window in the front, and climbed a ladder or platform up to the truck bed. The attendent then took a sample of grain by pushing a probe into the load. The probe took wheat from all depths of the load, supposedly making it difficult to hide wet wheat at the bottom. From the sample were made moisture tests, protein tests, and examinations for foreign matter. The attendent taking samples might be the grizzled old manager of a branch elevator, but to the delight of young truck drivers, "he" might be a pretty teenage girl--hired, it often was said, to attract trade. The sample taken, the truck rolled off to dump.

The truck entered large doors and stopped over a heavy grate of bars or pipes through which the grain was dumped. An attendent, looking like a filthy surgeon with his clothes grimy and his nose covered by a mask, opened the hatch at the rear of the truck and shouted, "take 'er up!" The wheat cascaded to the pit below. The attendent took a scoop from a corner to usher the last bushels of grain from the corners of the bed, closed the hatch, and shouted, "Okay," whereupon the driver returned to the scales. There he picked up a ticket recording the amount of wheat dumped, determined by the weight of the load and the test weight, and the name of the owner. The truck driver dared not lose a ticket. Pocketing it, he sped back to the field with the empty truck. Other truck drivers were repeating the process.

The boss meanwhile had a hundred cares. If he drove a combine himself, he issued a steady stream of instructions over the CB. If not,

he rushed from place to place. He fetched parts from town. He reassured farmers who came to the field to check on the work ("Yes, sir, I told the boys to run slow and low through that down stuff in the low spots."). He picked up handfuls of straw and chaff in the wake of passing combines and inspected it to make sure all were threshing cleanly. He visited other fields to decide where to move next.

Inevitably there were problems, which brought the boss on the run. Usually they were minor: a combine stuck in the mud had to be pulled out backwards; a cylinder plugged with heavy straw had to be cleared. Other breakdowns took longer to remedy. Worn bearings needed to be replaced, or the welder had to be fired up to mend a cracked reel shaft or some other part. Worst of all, some part might break which could not be replaced from the local dealer's stock. A hundred-mile drive to get parts was commonplace, and implement dealers, usually willing to help, might fly hundreds of miles to obtain a particular item.

Noon brought no pause in the action. The women delivered dinner to the field, and the men ate a few at a time seated on trucks or standing. Truck drivers ate quickly and then caught hold of the ladder of a passing combine to drive it for a round while the combine driver ate. Generally last to eat was the boss.

Work intensified during the heat of the afternoon. More people were cutting throughout the area by then, and lines of trucks waiting to dump at the elevator stretched out. The trucks might have trouble keeping up with the combines, and nothing was more frustrating than to have combines sitting in the field with full bins and nowhere to dump.

Consulting with the farmer, the boss might decide to haul to some other elevator or to bins on the farm. Trucks hauling to bins on the farm kept up with the combines easily, but truck drivers hated it because they were deprived of their trips to town.

During the heat of the afternoon combine drivers fared better than anyone else, at least in the 1970s. Decades earlier combine driving was a test of endurance, handling clumsy machinery in the hot sun. "If a feller put an umbrella up over his seat, we figured he was a sissy," one harvester explained.[8] Later custom cutters overcame these qualms and enjoyed air-conditioned cabs with AM radios. Hydrostatic transmission and power steering made driving less of a burden. Gauges to the right and idiot lights above indicated to the driver whether all shafts were turning properly.

If there was any leisure for the women with the outfit, it came in the afternoon, after dinner was served and any necessary laundry was done. This also was the time for buying groceries and visiting friends. In the middle of the afternoon began the preparation of supper, the largest meal of the day.

Supper, like dinner, was eaten in the field. This time the work, if it did not stop, at least abated for the meal. The combines might be shut down while the drivers ate, although not usually all at once. The men found seats on vehicles somewhere and ate. When most people were quitting work and going home, they faced long hours yet in the field. They wondered when the boss would decide to knock off for the night. If the wheat stayed dry they would cut at least until eleven or midnight, but an early dew might rescue them.

Soon the machines roared again, and as darkness fell, headlights illumined stalks of wheat soon to be swept in by revolving reels. In all directions the lights of other outfits could be seen popping on. In the darkness the throbbing rumble of many combines coming from all directions became more noticable than it had been in the day. Chatter on the CB died out except for necessary messages. This was the loneliest time of day.

Finally the word came from the boss to shut down for the night. As each combine filled up for the last time, it wheeled up beside a truck to dump and then proceeded to the edge of the field and parked, taking a place in line with the other machines. The men crowded into the trucks for the trip back to the trailers. They retired quickly on their arrival.

Not all days were so grueling. Rainy weather meant lost money for custom cutters, but after a long stretch of unabated harvesting, a shower was a blessing to a tired crew. Wet wheat meant sleeping in, breakfast at eight or so, and a day without hectic activity. Men did their laundry and personal shopping. They made repairs on equipment that they had been meaning to get around to for some time. They took combines and vehicles to car washes. Instead of the lonely time in the field after sundown, there was companionship around a card table.

The wheat harvest was a prolonged sprint, lasting from three to six months. During the rest of the year the style of life for custom cutters changed. Crewmen and sons and daughters returned to high school and college. For farming families there was work to catch up on at home. If a custom cutter continued harvesting into the fall, the pace of the work at least changed. If he picked up windrows in the north,

his day rapidly became shorter because of earlier nightfall. If he harvested row crops in the south, the work probably was near home. The work was not so hurried as the wheat harvest, and so he ceased working on Sundays.

To those not familiar with the business, custom combining seemed like a strain on family life, leading to rootlessness and dissatisfaction. This was not the case at all. No statistics were available, but to all appearances, marriages were strengthened rather than weakened by custom cutting, perhaps because husband and wife both shared in the business. The effect of custom cutting on children of harvesting families seemed to be salutory. Custom cutters never allowed harvesting to interfere with their youngsters' schooling, and so about all a child missed out on by going on the harvest was Little League baseball. In return, custom cutters testified that working the harvest gave their offspring maturity and industry. Sons of the boss learned early to take responsibility and work hard.

If there was a disruptive influence in family affairs, it was in the area of religion. Roman Catholics and Southern Baptists, Methodists and Mennonites almost to a man joined in the heathen practice of harvesting on Sunday, barring rain. If Sunday happened to be rainy, few harvesters forewent the chance for rest in order to attend church services. If questioned about this, some acted a bit penitent, but not much so, and a few mumbled Biblical allusions to saving the ass which fell into the pit on the Sabbath. Often the women succeeded in packing the children off to church, but rarely the men. Sometimes the farmer an outfit was cutting for wished no work done on his place on Sunday, or in the case of the occasional Seventh Day Adventist, on Saturday.

Custom cutters generally then moved onto a neighboring farm for the day's work.

Custom cutters remained mysterious, mistrusted figures to most people not connected with the business. Their image suffered from the preponderance of two related myths about them, the first of which was the myth of the gypsy. Journalists generally characterized custom cutters as footloose nomads wandering the plains. A feature in Newsweek in 1977 carried the headline, "Gypsies of the Harvest."[9] Stories of snubs by local people were rife among custom cutters. For instance there was the family of harvesters that entered a cafe in a small town after nightfall looking as exhausted as they ought to have after a full day of travel, only to be welcomed by a waitress with the comment, "What carnival are y'all with?" Or there was the young harvest hand who managed to make a date with a local girl in North Dakota. As he entered the girl's house, her mother gave him a cold stare and the greeting, "So--you're a combiner." Townspeople on the northern plains tagged custom cutters with the appellation, "wheaties."[10]

Those who considered custom cutters gypsies, migrants, or nomads misunderstood them. Custom cutters never wandered aimlessly, but proceeded methodically from one planned stop to another. They rightly should have been called itinerants, for they had definite itineraries. At each stop there were friendships as well as jobs. Custom cutters often cited as the great joy of their business the string of friends they made on the way north. For a custom cutter to quit the business would have been equivalent to the dweller in a small town moving away from all his friends.

The myth of the gypsy may have originated in associations made early in the history of custom combining. When the industry began, the image of the migrant Okie was still fresh from the 1930s. Many of the early custom cutters were from Oklahoma or the southern plains and thus conjured an unfavorable image as they moved from town to town. People also confused custom cutters with the irresponsible bindlestiffs of decades past. Such associations became absurd when applied to modern custom cutters, with their large amounts of capital invested in outfits.

A related misconception that also took root in the early history of custom combining was the myth of the ruffian. During the early 1940s, when custom cutters had to hire whatever hands they could find, the workers often were not of the highest character. The business had more than its share of barroom denizens and poolhall loafers not averse to raising hell in quiet towns along their route. Few women traveled with custom outfits, and so custom harvesters were a dirty and profane lot. Everett Squires, a big custom cutter during the war with his seven machines and twenty or more employees, occasionally resorted to his fists to keep order on the crew.

In a few years the composition of custom crews changed radically. Untrustworthy bosses were culled by economic adversity, and students became the mainstays of the crews. Yet in the towns frequented by a later, quieter generation of custom cutters, a "lock up your wives and daughters" attitude persisted despite the change.

Such attitudes differed sharply from the images that custom cutters held of themselves. Custom cutters considered themselves careful, substantial, successful businessmen, and anyone who weathered a number of years in the business had the right to so regard himself.

They deplored the denigration of their craft, but while poking fun at the sort of images projected by Wild Harvest, they took pride that there was something special and even a bit romantic in their way of life, although they would not use the word "romance." A man with the acumen to succeed in custom cutting could do well in some other, safer business. Why then did he follow the harvest?

Most custom cutters answered with a phrase like, "It gets in your blood." They were the first to admit that life in the field often was drudgery and that they were glad when the harvesting season was over, but by the next spring these feelings were forgotten. The difficulty and unpredictability of their business became a point of pride. "It's the exact opposite of going to work at Hesston [farm implement manufacturers]," said Ron Roessler of Buhler. "Every day there is a challenge."[11]

"Custom combining is great. It is a lot of hard work and sometimes a lot of headaches," was the incongruous testimony of another custom cutting couple. "But every spring when the first few warm days roll around, you just start counting the days and minutes until you can head south. It is something that really gets in your blood. It'll be a sad day when we quit the business."[12] For some, at least, custom combining held attractions that far outweighed the toil and trouble.

FOOTNOTES

[1]Hecht, Transient Combine-Harvester-Threshers in the Great Plains, 1942.

[2]Lagrone and Gavett, Interstate Custom Combining in the Great Plains in 1971, p. 14-15.

[3]Personal interview, Mable Squires.

[4]Personal interview, Everett Squires.

[5]Diaries of Flava Bever, Cedar Vale, Kansas.

[6]Personal interviews with members of the crew of Bernel Elmore in Vernon, Texas, June, 1977.

[7]Personal interviews with members of the crew of Richard Squires in Taloga, Oklahoma, and Tribune, Kansas, June, 1977; diaries of Flava Bever.

[8]Personal interview, Jack Schlessiger.

[9]Newsweek, Vol. XC, No. 1 (July 4, 1977), pp. 65-66.

[10]Personal interview, Irvin Zecha; Ann Montgomery, "'Wheaties' Share Problems Common to Small Town Life," Foster County Independent (Carrington, North Dakota), September 22, 1976, p. 25.

[11]Personal interview, Ron Roessler.

[12]Comments enclosed with questionaires returned to author.

CHAPTER VII

GOVERNMENT AND CUSTOM COMBINING

Custom combining was a business of proud, independent individuals. The man who became a custom cutter showed by that act that he was not one to wait on the beneficence of others, but would try on his own to better his condition. Custom cutters asked few favors of government, and because their numbers were politically insignificant, they expected none. Federal and state governments took few actions for the benefit of custom harvesters, but many governmental measures affected their business. Most of these were actions designed to direct or to regulate the activities of custom cutters.

Early in the history of custom combining, the government of the United States attempted to rationalize the wheat harvest as part of the country's agricultural mobilization for World War II. This was one aspect of an effort to employ agricultural labor and machinery more efficiently when both were at a premium. When the war began, the recruitment and placement of farm labor was in the hands of the United States Employment Service, the organization of which was too decentralized to impose order on the management of agricultural labor. The prerogatives of state directors stood in the way of rapid clearance of workers from one state to another. Reforms instituted in December, 1941, placed more authority in the hands of federal administrators.

The Employment Service supervised the placement of farm labor in 1942, but thereafter federal administrators and Congress hoped to put such work into the hands of another agency. On January 23, 1943, the War Manpower Administration issued a directive transferring responsibility for farm labor to the Department of Agriculture. On March 13 Secretary of Agriculture Wickard assigned the work to the federal Agricultural Extension Service. These shifts only anticipated the formal action of Congress in the Emergency Farm Labor Act of April 29, 1943. This act reaffirmed the responsibility of the Extension Service, through its state services, for the recruitment and direction of farm labor. The War Food Administration, a division of the Extension Service, was to have general charge of programs for farm labor.

In 1942, the first year of any considerable movement of custom combiners on the plains, they had received little attention from the state employment services. Custom cutters were not farm laborers of the sort that employment officials were used to, and there was no organization ready to handle them. Already the Department of Agriculture had stepped in to help with the wheat harvest. Its state and county war boards, part of the War Food Administration, exchanged information about the availability and movements of custom combines, but did little to aid or direct the flow of machines and men. In succeeding years the Extension Service would mount more vigorous efforts.

Under the Emergency Farm Labor Act of 1943, each state extension director was to formulate a plan for the direction of farm labor in his state and then present it to the federal Extension Service for coordination with other states. Each state extension director appointed a state farm labor supervisor and assigned field assistants to him. The

farm labor supervisor set up a farm-labor advisory committee made up of citizens from the state and personnel from the state extension service. The service's county agents were to be the infantry of the effort. Each agent was to establish a placement center for farm labor and set up a farm-labor advisory committee in his own county. He was to solicit the participation of leaders of farmers' organizations, members of the old war boards, employees of the state employment service, and representatives of civic groups. The county agent also was to form a county wage board composed of himself and four other members to set wages for farm labor in the county, including rates for custom combining.[1]

The Extension Service was not yet ready to handle harvest labor in all states in 1943, and so many state extension directors chose to farm out the job to the state employment service. The state extension directors who chose to do this made contracts with the employment services of their states to recruit and place agricultural workers. Custom combines were a special case, however. The war boards of the various states and counties had begun the work of planning the movement of custom combines in 1942, and so in 1943 the Extension Service theoretically delegated this task to them again. The war boards again accumulated information about the needs and availability of custom combines, but once the harvest began, they did little. The work of recruiting custom cutters to make the harvest and of placing them on jobs fell into the laps of the county extension agents, the county war boards in many cases specifically delegating all their authority in such matters to the county agents.[2]

The county extension agents, acting on behalf of the county war boards, surveyed their counties prior to the harvest to determine how many custom combines would be needed and how many owners of combines in the county were willing to do custom work. They reported the needs and resources of their counties to the state directors of extension. The state directors in turn made efforts to meet the needs reported in two ways: they called on other state directors and on their own county agents to dispatch combines to areas of need, and they released information to newspapers and radio stations telling where combines were needed. Fortunately the harvest of 1943 was not as difficult as that of the following year, and so the Extension Service had a year to tinker with its organization without causing crises.[3]

The effectiveness of placement services in 1943 varied among the individual states, but South Dakota showed how useful such efforts could be. The state extension service stationed employees at Oelrichs and Fairfax, the two ports of entry through which the most custom cutters entered, and placed signs at the other five ports directing incoming harvesters to report to the nearest office of a county war board. Meanwhile county extension agents had reported their needs for combines to the state assistant director of extension, who set up headquarters for the harvest at the office of the state war board. He telephoned the officials at the ports of entry and the county agents to inform them where to direct incoming combines. This system gave initial directions to outfits bringing in 253 combines. Other custom cutters entered the state with jobs already arranged, but received additional work through the placement service.[4]

Placement was generally more efficient in 1944 than in 1943. The extension services of all the states in which custom cutters worked except North Dakota discarded agreements with the state employment services and completed their own organizations for handling harvest labor, including custom cutters. This made possible better direction of combines within and among the states. County agents shed the facade of cooperation with county war boards and took full control of the program, employing farm labor assistants to help.

A number of states opened special offices as headquarters for the duration of the harvest. These served as clearinghouses for information. In Texas the state extension service set up headquarters for the harvest at Plainview, in Kansas at Great Bend. In Oklahoma and Nebraska the extension services retained overall control of placement for the harvest in their state offices, but established area offices in the wheat-producing areas. Clinton and Enid in Oklahoma and McCook and Alliance in Nebraska were locations of temporary offices. In South Dakota the extension service supervised placement from the state office, but set up a number of area offices. The employment service worked with a similar arrangement in North Dakota. In other states of concern to custom cutters, the extension services deemed their state offices and county agents sufficient to handle the harvest.

In each county the county agents determined how many combines were needed and reported either to area offices or directly to state extension service offices. County agents also maintained lists of farmers seeking harvesters in their counties. The state and area offices relayed to the county agents information on what other areas needed combines. A pamphlet issued by the state extension service of Montana

outlined to custom cutters how to secure placement through the extension services. Custom cutters could obtain information about where combines were in short supply from officials at ports of entry or at county agents' offices. Then they could telephone ahead to the county agent of the county in which they hoped to harvest. When they arrived in the county in which they intended to work, the county agent would direct them to farmers needing cutters. When finished in any county, custom cutters could consult the county agent or the state extension service for information as to where to go next.[5]

In 1945 the extension services expanded their programs for placement further yet. First the Extension Service in Washington published a map and information sheet for custom cutters. This contained information on how much wheat would be available to cut and when the dates of harvest would be in all parts of the plains. It also provided the names of all county agents. The map showed the principal highways suitable for travel by custom cutters and the ports of entry through which they would pass. The state extension services distributed the map to custom cutters.[6]

In late April representatives from the state extension services concerned with harvest labor gathered in Plainview, Texas, to agree on procedures for clearing custom outfits from one state to another and to compare plans for placement within their states.[7] Each state extension service then in turn implemented its own plan for the harvest. Authorities in Texas fumbled in the face of a difficult harvest. When drought caused the abandonment of some acreage in the Panhandle, the extension service issued a statement that the need for custom cutters that year was dubious. Magnification of this announcement by radio and

newspapers scared many needed custom cutters away from Texas, causing shortages. Nevertheless, the network for placement in the state worked well, again headed by an office in Plainview. County agents found jobs for nearly 3,000 custom combines, the majority of which came from within the state, and made more than 2,000 referrals of combines to other counties or states. Despite early problems, more combines worked in the state than ever before.[8]

As custom cutters crossed the Red River into Oklahoma, they saw signs directing them to the nearest county agent's office for help in placement. Early in the spring each county agent had held a meeting of farmers to estimate the needs for combines and explain procedures for obtaining harvesters. During the harvest each county agent reported by telegraph to a headquarters established in Clinton, telling of the progress of the harvest and of needs for men and machines. The director of the office at Clinton telephoned the director of farm labor in Stillwater each morning with this information, which was passed on to major radio stations for daily broadcasts. County agents carried out their usual functions of placement and referral. As the harvest progressed into northwest Oklahoma, a second special office at Enid opened for business.[9]

The state extension service of Kansas put together a system for direction of the harvest superior to all others. As in other states, each county agent estimated the needs of his county for combines. County agents in counties with the greatest production of wheat hired farm labor assistants and clerks for the harvest. In May officials from the state office held nine meetings with county agents from different parts of the state to plan procedures for the harvest. The

state extension service printed 5,000 copies of a guide for custom combiners in Kansas to be distributed by county agents and at ports of entry.

As custom cutters crossed the border in Kansas, they were registered on forms provided by the state extension service and were referred to county agents for help in placement. County agents in the state placed 2,720 combines on jobs, but this was less important than other aspects of the extension service's effort. County agents were well fitted to keep lists of farmers needing harvesters and make local arrangements for jobs, but it was unwieldy to have scores of county agents trying to make referrals to other counties at the same time. They could not coordinate their referrals. Officials in Kansas therefore placed the job of referral in the hands of the state headquarters for harvest placement. E. H. Leker, assistant farm labor supervisor for the state extension service, opened a special office in Great Bend to direct the harvest. Each night the county agents sent letters to Leker detailing the condition of the crop, the progress of the harvest, and the need for combines. Leker charted this information on a map in his office every morning. Looking over the needs in various parts of the state, he wrote press releases for the Associated Press and for the local radio station. Next he fired off a telegram to the state extension office in Manhattan with information for a spot announcement to be carried on radio stations throughout the state. The emphasis of the program had shifted from individual referral to use of mass communication for direction of harvesters. The next year Leker was promoted to regional supervisor of farm labor.[10]

The extension service of Nebraska implemented a plan much like that of Oklahoma, with two successive centers for the direction of the harvest. The first temporary office was in McCook, on the southern border, and its purpose was to make referrals to counties of need in Nebraska. As the harvest finished up in the state, the headquarters shifted northwest to Alliance, the better to make referrals to states to the north and west.

States farther to the north generally had placement programs less sophisticated than those to the south. The extension service in South Dakota opened two temporary offices for referral of custom combines, in Pierre and in Rapid City. The extension service of Montana directed placement through its regular state office. In Colorado and Wyoming there was no attempt to direct custom cutters on a state level, but county agents worked locally to bring farmers and custom cutters together.[11]

There were few innovations to make in the system of placement in the years 1946 and 1947 that had not at least been foreshadowed in 1945. In each of the two years representatives of the state extension services convened to discuss their programs for the harvest, meeting in 1946 in Oklahoma and in 1947 in Kansas. Then the states set up their own systems as they wanted them, but they tended to adopt the sort of methods that had been introduced in Kansas in 1945--greater reliance on radio and the press to disseminate information, less emphasis on individual referrals. County agents reported to area or state headquarters daily by telegraph or telephone. By 8:00 or 8:30 in the morning the information was reported to the state office; by 9:00 or 9:30 it was tabulated; by 10:00 or so press releases went out to

newspapers and radio. Each afternoon the same information was put into a letter mailed to all county agents. In 1946 the federal Extension Service again issued a map and information sheet for custom cutters. In 1947 the guide blossomed into a lengthy brochure with maps of specific areas, lists of the names and offices of county agents, estimates of the number of custom cutters that would be needed, and information on the laws of various states in regard to the movement of equipment.[12]

The systems designed by the federal Extension Service and its state extension services brought some benefits to custom cutters. It was a great service to a custom combiner just beginning in the business to be provided with customers by county extension agents. The general information about areas in need of combines was of use as well in planning movements. However, any benefits which accrued to custom cutters from the efforts of the extension services were incidental to the primary purposes of the programs. The task of the extension service was to please farmers, not custom cutters. The objective was to eliminate shortages of combines and thus save farmers' crops. This often meant the active recruitment of additional harvesters to do custom work, which obviously was contrary to the interests of custom cutters already in the business, for the shorter the supply of combines, the greater the rates they could earn. By recruiting enough combines to serve the needs of farmers in 1947 and earlier years, the Extension Service contributed to the surpluses of combines which prevailed from 1948 on. After 1947 services to direct custom cutters were of less use to farmers, for there were plenty of combines to be had. Accordingly in 1948 Congress discontinued funding for the handling of farm labor by

the Extension Service. Custom cutters were more in need of direction than ever before in 1948, but custom cutters never had been supposed to be the beneficiaries of programs for placement.

In 1948 the United States Employment Service again assumed responsibility for the placement of agricultural labor, including this time the direction of custom combines. Thereafter the state employment services, coordinated and financed by the United States Employment Service, administered programs to replace those which had been offered by the state extension services. They followed patterns of organization that the extension services had developed. The extent of the effort to direct custom combines varied among the states, but the separate efforts had common elements. Each state employment service had a director of farm placement who organized efforts. Each also had a process for gathering and disseminating information about the progress of the harvest. Each state maintained services of placement, compiling lists of farmers needing harvesters and custom cutters needing work.

The system of placement and direction established by the Kansas State Employment Service made good use of the experience of the extension service. Each year the organization published a guide for custom cutters with information about placement services and state statutes. As had the earlier organization, the employment service opened a special office in Great Bend called the Wheat Harvest Control Office. The employment service also had a dozen permanent offices in the western two-thirds of the state, each of which included a farm placement representative. In those counties in which there was no permanent office of the employment service, the service hired temporary farm placement

representatives. These often were teachers or retired men. They set up offices wherever space was available, most often in the county courthouses or the offices of the county extension agents.

The task of the Wheat Harvest Control Office was to gather and give out information about the progress of the harvest and the needs for workers and equipment. Each morning the farm placement representatives, both the temporary ones and the ones in permanent offices, surveyed the situation in their own areas. They made a few telephone calls to elevators to find out how much harvesting was going on, and they checked their own records to see if they had jobs to fill or combines to place. Then they reported by telegraph to the Wheat Harvest Control Office. Personnel there, a supervisor and a couple of secretaries, compiled the information into a daily bulletin which they mailed to all farm placement representatives and distributed to county agents and custom cutters. Then followed news releases to local representatives of the Associated Press and United Press International, which ensured the publication of information about the harvest in newspapers and on radio stations throughout the wheat-producing areas of the state. The most complete report was available on Radio KVGB, Great Bend. The dissemination of information by this process was the most important part of the service's work. Farm placement representatives, both temporary and permanent, also made individual placements of custom cutters with farmers. The whole system closely paralleled that which the state extension service had operated earlier, except that farm placement representatives of the employment service replaced county extension agents in the structure.

The system in Kansas changed only slightly through the years. For several years in the early 1960s there was no temporary office in Great Bend, the director of farm placement supervising programs for the harvest directly from his office in Topeka. In 1967 the office reopened in Great Bend under the name of the Harvest Control Center. There also were two changes in the manner of reporting information to the office in Great Bend. Telephone replaced telegraph as the means of reporting from the farm placement representatives, and they made their reports to the permanent farm placement representatives in the regional offices of the employment service. The representatives in the permanent offices then forwarded the information to Great Bend.[13]

The Oklahoma Employment Security Commission established a slightly different system for placement in the harvest. The service opened no temporary center for control of the harvest as in Kansas, but directed activities from its farm placement office in Oklahoma City. Like their counterparts in Kansas, officials in Oklahoma used their permanent regional offices, each of which had a farm placement representative, as centers for the direction of combines. They did not attempt to recruit temporary representatives for every county, but instead established from a half-dozen to a dozen temporary offices in areas without permanent offices, staffed with employees of the employment service. These opened and closed successively from north to south, beginning with one at Frederick on the southern border and ending with one at Guymon in the Panhandle. During the course of the wheat harvest the service produced about twenty harvest labor bulletins and issued news releases for newspapers and radio. Placement of harvesters was through either the permanent regional offices or the temporary offices. Like the service

in Kansas, the Oklahoma Employment Security Commission each year published a guide for custom combiners.[14]

The Nebraska State Employment Service implemented procedures for placement in the harvest similar in some ways to those in Kansas and in other ways to those in Oklahoma. As in Kansas, there were temporary offices staffed with local people in each of the wheat-producing counties. As in Oklahoma, there also were temporary regional offices manned by permanent employees of the employment service who moved their operations from town to town with the progress of the harvest. Like the other state services, the Nebraska State Employment Service published a guide for custom cutters. The farm placement service in Nebraska also had certain unique features. Each year prior to the harvest the service held an organizational meeting at North Platte for all personnel who would be involved in the wheat harvest. The employment service arranged with officials at the ports of entry to register all incoming combines. Custom cutters in Nebraska also enjoyed an unusual benefit provided by the farm placement service: the service maintained several camps in which harvesters could park free of charge. The reason for this was that Nebraska almost always had surpluses of custom combines, especially as the harvest entered the northwest part of the state, where the wheat belt narrowed. The purpose of the camps for harvesters was to provide them a place to stay when idle, thus keeping them from cluttering streets and alleys.[15]

The most awesome effort at placement in the harvest was that of the North Dakota State Employment Service. In North Dakota the state employment service had administered programs for harvest labor since before World War II, operating them through 1947 under contract with

the state extension service. The farm placement service organized a formidable militia for each harvest--two hundred or more volunteer placement representatives, one in nearly every town, serving without pay. The volunteers were willing to assist not only as a public service, but also because they were businessmen who hoped to attract the trade of people who used their services. Accordingly, the most common place of business for volunteers was a tavern, with filling stations and grain elevators also well represented. These volunteers performed the functions of placement and intelligence common to the organizations of other states in the wheat belt. Each permanent regional office of the employment service had a supervisor of farm placement who was responsible for oversight of the volunteer farm placement representatives in his area.

Officials of the state farm placement office in North Dakota spared no efforts in spreading information about the harvest. They issued daily harvest labor bulletins--"pink sheets"--and press releases to newspapers, radio stations, and news services. They prepared special interviews and radio spots for broadcasts prior to the harvest. They published and distributed a guide for custom cutters.[16]

Other state employment services made less intricate preparations for handling the harvest. The farm placement service of the South Dakota State Employment Service opened only four to six temporary offices each year. The services in Montana, Wyoming, and Colorado all handled the demands of harvest through their permanent regional offices. Each of these four states issued harvest labor bulletins, usually two or three times a week. The Texas State Employment Service originally opened temporary offices for the wheat harvest like those in Oklahoma,

but by the mid-1960s the service had discontinued all programs for custom cutters except individual placements through permanent regional offices.[17]

The United States Employment Service provided the funds for the state services to offer programs of farm placement, but it did little to coordinate the efforts of the individual states. All individual placement was done on a local basis; there was no attempt to refer combines to specific destinations across state lines. From 1959 to 1966 the ten states of the Great Plains maintained an arrangement to exchange information among themselves, but the parties eventually concluded that such a broad agreement was unnecessary. The individual states continued to keep each other informed, mailing their harvest labor bulletins to neighboring states. Only in one year did the United States Employment Service publish a comprehensive guide for custom cutters with information on all the states of the Great Plains.[18]

The programs conducted by the farm placement services of the various states were of more use to some custom cutters than to others. Custom cutters just starting in the business made good use of the guides published by the states and consulted harvest labor bulletins in planning their movements. Some received placements. For experienced custom cutters the placement services had little value. They needed no placements, because their jobs already were arranged with regular customers; they needed no bulletins, because they learned when they were needed at each of their stops through direct contact with their customers. Both farmers and custom cutters also mistrusted officials of the placement services, fearing they would be forced into accepting harvesters or jobs not to their liking. Ted Hardwick of Saxmon, Kansas,

told the story of how he once entered a placement office in southern Kansas and asked if there were any jobs available for custom cutters. The clerk told him there were none, and so he left. An old farmer who had been seated inside followed him out the door and offered him a job. The farmer had feared that if he applied to the farm placement service for a cutter he might be sent a poor outfit and be stuck with it. He therefore sat quietly in the placement office until he saw a custom cutter that suited his tastes and then resolved to hire him.[19]

The first purpose of the farm placement services of the states, as had been the case with the earlier efforts of the extension services, was to fill the needs of farmers for harvesters. The services were state efforts designed to benefit the farmers at home first and custom cutters only incidentally. Custom combines seldom were in short supply. Whenever a farmer asked the placement service to supply him with a custom outfit he got one, but only a few of the custom cutters who asked the help of the placement services received jobs through them. If the harvest proceeded without complications, then the placement services had little to do except to compile and issue information. When rains caused dislocations in the supply of combines, the placement services served well in bringing together farmers who were left without combines when their custom cutters pulled out and small custom outfits who remained in muddy areas to clean up the work.

Other aspects of government besides placement services affected custom cutters. During World War II rationing was a great concern among them, but fortunately officials of the Agricultural Extension Service fought for the interests of custom cutters. They persuaded the Office of Price Administration to ration sufficient supplies of gasoline and

tires to keep the combines rolling. Custom cutters had high priority among agricultural consumers of such items because their services were vital to numerous farmers.

It was against agencies of state governments that custom cutters had enduring complaints. Each state had its own set of laws of concern to custom cutters. Not only were they different among the states, but also they were enforced with varying strictness from state to state and from year to year. During World War II, because of the shortage of combines, state officials placed few strictures on the activities of custom cutters and even made special exceptions to statutes in order to help them. The governor of Montana ruled by executive proclamation that because of the emergency, the state would not require custom cutters to license their vehicles when entering from out of state. The proclamation, of dubious legality, never was challenged. Likewise the governor of South Dakota, when so empowered by statute, suspended requirements for custom cutters to buy licenses for their vehicles in South Dakota.[20]

In later years, when the supply of combines was adequate, state officials became more hard-nosed. For many years certain states required custom cutters to buy local licenses for all their vehicles before they could work in the states or even travel in them. In the eyes of custom cutters Montana and South Dakota were the great offenders in this matter, for as late as 1975 these two states required custom cutters to buy licenses for the full year for all vehicles. In Montana even self-propelled combines had to be licensed. One custom cutter complained that it cost him more than four hundred dollars to bring his outfit of four combines into Montana in 1967. Custom cutters believed

that the lobbying power behind such requirements came from farm implement dealers who hoped to increase sales by discouraging custom work.

Other states were more lenient. Some, like North Dakota, required that custom cutters purchase licenses for a half-year, while others required no licenses at all. Officials in Kansas specifically exempted custom cutters from requirements of licenses. By the 1970s most states had made provision for custom cutters to work under temporary permits. This meant purchasing a sticker good for thirty days or some such period at a port of entry. In most states these were temporary hauling permits no different from those issued to any truck coming into the state for a short time, but in Montana and South Dakota from 1976 on, custom cutters purchased special harvester's permits.

Other regulations, although not so costly, were equally confusing to custom cutters. Before setting out for the season they had to scrutinize the regulations of the states about oversize loads. By the 1950s nearly all the states required wide load permits for loads wider than nine feet. Custom cutters with combines loaded on trucks also often exceeded height limits. When hauling grain, nearly all custom cutters violated statutes setting the maximum weight to be hauled by vehicles of their class. Officials in most states winked at these illegal loads, for to enforce the law would have meant protests from farmers who employed custom cutters. However, highway patrolmen in South Dakota had the reputation of being sticklers about weight limits, sometimes even watching the scales as trucks came through the elevator. In any state a single patrolman with a stubborn disposition could cause trouble for custom cutters.

For many custom cutters the most exasperating regulations were those designed to prevent the spread of noxious weeds. These required custom cutters to clean their machines of all weeds or seeds before moving from one field to another. This was impossible to enforce, but state inspectors manned the ports of entry and required custom cutters to clean their machines before entering the state. The states of Kansas and Nebraska had the strictest systems for weed inspections. When custom cutters arrived at ports of entry without having cleaned their combines, they were required not only to clean them before proceeding, but also to drive back south across the state line and dump the weeds in the state from which they came. Harvesters complained that the laws were enforced arbitrarily and inconsistently. Records of weed inspections in Nebraska showed that custom cutters had some reason for complaint. The Division of Noxious Weeds in the Nebraska State Department of Agriculture hired temporary employees to conduct inspections at the ports of entry. These usually were retired men. Some of these inspectors turned back nearly half of the combines that came to their posts, while others turned back none at all.[21]

None of these regulations ever was so oppressive as to drive custom combiners out of the business, but they were an annoyance. Custom cutters, with their mobile capital and labor, were a fitting adaptation to the physical conditions of the Great Plains, but political jurisdictions cut across geographic divisions. Adaptation to the physical environment brought conflict with the political environment. Interstate compacts might have eliminated the difficulties of custom cutters with state statutes.

Cutsom cutters owed some debts to the actions of government in the early years of the industry, when the United States Extension Service and the state extension services did what they could to encourage and facilitate custom work. Likewise the programs of the farm placement services of the state employment services often were of use to custom cutters. However, custom combining did not owe its existence to the actions of government, nor did it depend on governmental patronage for continued operation. Had the government never instituted any services for guidance and placement of custom cutters, the business would have developed in much the same way. The industry was the product of environmental and economic conditions, not of governmental planning. In a larger sense the effect of placement services on custom cutters was irrelevent, because the services were designed to facilitate the harvest and benefit farmers, not to help custom cutters. To do this, state officials adopted methods similar to those of custom cutters: temporary offices, part-time help, and mobile facilities were born of the same needs for flexibility in the harvest that spawned custom combining. Seasonal farm placement services and custom combining both were parts of the continuing adaptation of the harvest.

FOOTNOTES

[1]Wayne D. Rasmussen, "A History of the Emergency Farm Labor Supply Program, 1943-47," Bureau of Agricultural Economics, United States Department of Agriculture, Agriculture Monograph No. 13, pp. 24, 34-45, 65-73, 90; War Food Administration, United States Department of Agriculture, Report of Cooperative Extension Work in Agriculture and Home Economics, 1943, pp. 3-4.

[2]Rasmussen, "A History of the Emergency Farm Labor Supply Program, 1943-47," pp. 78, 90; Leker, Farm Labor Program for Wheat and Other Small Grain Harvest in the Great Plains States, 1943 to 1947, p. 6.

[3]Leker, Farm Labor Program for Wheat and Other Small Grain Harvest in the Great Plains States, 1943 to 1947, pp. 7-8.

[4]"South Dakota Directs Itinerant Combines," Extension Service Review, Vol. XV, No. 2 (February, 1944), p. 19.

[5]Leker, Farm Labor Program for Wheat and Other Small Grain Harvest in the Great Plains States, 1943 to 1947, pp. 8-9; Montana State Extension Service, Custom Combine Operator's Guide for Montana (1944), p. 1.

[6]Hepler, Farm Labor Program for Wheat and Small Grain Harvest, p. 1; Agricultural Extension Service, United States Department of Agriculture, Wheat and Small Grain Harvest, Western Great Plains States, (1945), throughout.

[7]Leker, Farm Labor Program for Wheat and Other Small Grain Harvest in the Great Plains States, 1943 to 1947, pp. 9-10.

[8]Hepler, Farm Labor Program for Wheat and Small Grain Harvest, pp. 6-9.

[9]Ibid., pp. 9-11.

[10]Ibid., pp. 12-17.

[11]Ibid., pp. 16-18, 2.

[12]Ibid., pp. 10-16; "Wheat Army Sweeps 10 States," Extension Service Review, Vol. XVIII, No. 7 (July, 1947), p. 87; Ralph W. Cessna, "The Combines Mobilize," Christian Science Monitor Magazine Section, August 17, 1946, p. 5; Agricultural Extension Service, United States Department of Agriculture, "Combine and Labor Guide, Wheat and Small Grain Harvest," United States Department of Agriculture Program Aid 29.

[13]Robert B. Gilkison, "Wheat Harvest Pattern," Employment Security Review, Vol. XVII, pp. 30-31; personal interview, Loyal Fortmeyer, Topeka, Kansas, September 2, 1976; personal interview, James Jay, Great Bend, Kansas, December 27, 1976.

[14]Annual reports of the Farm Placement Service (Rural Manpower Service) of the Oklahoma Employment Security Commission, titled variously Oklahoma's Farm Labor Report, Oklahoma Farm Labor Report, and Oklahoma Rural Manpower Report, for years 1953, 1957-1976; personal interview, John Shoemake, Oklahoma City, Oklahoma, April 8, 1977.

[15]Annual reports of the Farm Placement Service (Rural Manpower Service) of the Nebraska State Employment Service, 1948-1976, titled variously, Annual Farm Labor Report, Annual Rural Manpower Report; personal interview, Don Christenson, Lincoln, Nebraska, January 12, 1977.

[16]North Dakota State Employment Service, North Dakota Harvest Labor Report, for years 1948-1953; North Dakota Employment Security Bureau, Rural Manpower Report, 1975.

[17]Author's correspondence with officials of the Job Service of South Dakota, Montana State Employment Service, Wyoming State Employment Service, and Texas Employment Commission; scattered excerpts from reports enclosed in correspondence.

[18]Farm Placement Service, United States Employment Service, Wheat and Small Grain Harvest of the Great Plains States (1954).

[19]Personal interview, Ted Hardwick.

[20]Montana State Extension Service, Custom Combine Operator's Guide for Montana; "South Dakota Directs Itinerant Combines," Extension Service Review, Vol. XV, p. 19.

[21]Information on state statutes affecting custom cutters derived from correspondence with numerous state officials and agencies, from state guides for custom combiners bound in the annual reports of the farm placement services of the states, from Agricultural Extension Service, United States Department of Agriculture, "Wheat and Small-Grain Harvest Map of Great Plains States," and Farm Placement Service, United States Employment Service, Wheat and Small Grain Harvest of the Great Plains States.

CHAPTER VIII

(HARVEST) HANDS ACROSS THE BORDER

Custom combining found its most suitable home on the southern Great Plains of the United States. More custom cutters originated from there than from any other region, and more grain was custom cut there than anywhere else. The extension of custom combining into the northern plains, however, demonstrated that economic advantage could transgress state boundaries to link regions of geographic similarity.

Inasmuch as the Great Plains extended north also into western Canada, it was to be expected that custom combining should flourish there, too. The same circumstances that led to the rise of custom combining in the United States spawned a similar movement in Canada. Within the prairie provinces there was room for only limited movement by custom combiners. By means of arrangements between the governments of the United States and Canada, custom cutters from western Canada were enabled to join the flourishing movement from south to north along the wheat belt of the United States. To a lesser extent harvesters from the United States also went into Canada. Although this seemed like a logical and useful development, it was the cause of confusion and protest.

Wheat harvesting had developed in Canada much as in the United States. The adoption of the combine began at about the same time in the prairie provinces as in the Dakotas. As in the United States, the

seasonal movement of harvest hands into the wheatlands of Canada reached a peak in the mid-1920s with about 45,000 men involved, dwindling thereafter due to mechanization and depression. Yet by the time of World War II, wheat farmers in western Canada still depended on binders, threshers, and bindlestiffs about as much as did farmers in the spring wheat regions of the United States.

Although Canada entered World War II two years before the United States did, Canadian wheat farmers suffered no serious shortages of workers and machinery until 1942. In that year the Agricultural Division of the National Selective Service established the Dominion-Provincial Farm Labour Program. Administration of the program on the provincial level was in the hands of the provincial departments of agriculture. The department of agriculture of each province designated a supervisor of farm labor and set up a harvest labour committee. The network of officials was similar to that of the extension services in the United States. In order to recruit sufficient workers, the provincial departments of agriculture paid railway fares for workers from eastern towns and cities to the prairie provinces.[1]

Seasonal movement of custom combine outfits began at the same time. The harvest labour committees of the western provinces lent all possible support to the business, even to the point of subsidation. Owners of combines who wished to do custom work in another area received compensation for the expenses of moving machinery. A prospective custom cutter first contracted with a farmer in another area to harvest his crop. After moving to the place of employment, he filed a claim with the provincial harvest labour committee. The supervisor either would pay the custom cutter thirty cents for every mile he had moved the

equipment or would pay freight charges for transporting the machinery by rail or by truck. In 1944 the Saskatchewan Department of Agriculture paid 150 such claims, and in 1945, 157 claims totaling nearly $11,000. Most of the combines were drag machines, but about a third were self-propelled. A few of the machines were swathers or stationery separators rather than combines.[2]

Meanwhile the governments of the United States and Canada acted to make possible the international movement of harvesters. On June 17, 1942, months before the United States entered the war, the two governments had established the Joint Economic Committees to foster economic cooperation between the two nations. The agricultural subcommittees of these bodies discussed shortages of labor and machinery in agriculture, including the need for more efficient use of wheat harvesting machinery. In February, 1942, the committees recommended to their respective governments that regulations of customs and immigration be suspended in order to permit custom combine outfits to cross the international boundary with the harvest. Prime Minister W. L. Mackenzie King of Canada and President Franklin D. Roosevelt of the United States met in Hyde Park, New York, in April of 1942 to consider measures of increased cooperation during wartime. One product of the conference was an executive arrangement, announced on April 10, designed to facilitate the movement of custom combines.[3]

The arrangement, quoting the Joint Committees, stated the obvious. "The movement of machines within each country has contributed to economies in the use of machines and labor and achieved greater efficiency of agricultural output," it stated. "The removal of such regulations and restrictions as now impede the movements across the common boundary

of both farm machines and the labor associated with them, would further increase their efficient use, thereby contributing to the common war effort."[4]

Bureaucratic inertia prevented any large movement of custom combines across the border in 1942. Canadian officials, because harvest in their country did not begin until September, were in no hurry to conclude definite arrangements for international movement of harvesters. They took no action until June 29, when a telegram from the Canadian Department of External Affairs to the United States Department of State indicated willingness to work out procedures. Thomas Wailes, chief of the Canadian Section of the Department of State, conferred with John Stewart of the United States Department of Agriculture's Office of Foreign Agricultural Relations and with a representative of the United States Bureau of Immigration and Naturalization. Stewart soon after recommended a definite proposal be made to the Canadian government: custom combiners were to be permitted passage across the border only in units consisting of a combine, a truck and a tractor if necessary, and not more than four men. No passports were required for citizens of the United States entering Canada, and immigration officials in the United States were to waive requirements of passports for Canadians entering the United States, issuing them simple identification cards instead. These terms won the approval of the United States Department of State and the Canadian Department of External Affairs.[5]

The United States Immigration and Naturalization Service first waived provisions of laws prohibiting the importation of contract labor and then secured confirmation from the Department of State that requirements for passports were suspended. The service opened eighteen ports

of entry to custom cutters--eight each in Montana and North Dakota, two in Minnesota. Across the border, paired with the ports in the United States, were eighteen Canadian ports of entry--seven in Manitoba, nine in Saskatchewan, and two in Alberta.[6]

The state employment services in the United States and the provincial departments of agriculture in Canada unfolded procedures for directing harvesters that were remarkable for their informality. A custom cutter from the United States wishing to cross the border into Canada reported to the state director of the employment service in North Dakota, Montana, or Minnesota. If the deputy minister of agriculture in the province to which the custom cutter wished to go confirmed that work was available, then the director of the state employment service issued the necessary documents to pass the custom cutter across the border.[7] A custom cutter from Canada wishing to enter the United States went through the same process in reverse by first reporting to his deputy minister of agriculture. The harvesters involved paid no duties and posted no bond. Canadian custom combiners were not to remain more than twenty-nine days in the United States, for they would be needed at home in the fall, but harvesters from the United States in Canada could stay as long as they wished. Customs officials in the United States imposed one ridiculous regulation: they prohibited Canadian custom cutters from using their trucks or tractors to transport combines from one job to another in the United States.[8]

Because the season was so late by the time authorities acted, only two custom outfits from Canada worked in the United States in 1942, with only one combine each, and one of them stayed only two days. Seventeen custom cutters from the United States took eighteen combines into

Canada, not counting several who slipped through a port in Montana without being registered. Most of the traffic moved between Montana and Saskatchewan. The majority of the participants also were from Montana, but a few had ranged north from such points as Winfield, Kansas, or Billings, Oklahoma.[9]

Circumstances similar to those of 1942 again hampered the international movement of combines in 1943. In early June John Stewart of the Office of Agricultural Relations initiated discussions among representatives of the War Food Administration, the Immigration and Naturalization Service, and the Canadian legation to renew and improve arrangements for the exchange of harvesters. The participants agreed substantially on terms, but although the Canadian government threw no blocks in front of harvesters seeking to enter Canada, certain American officials were less cooperative. William Johnson, Commissioner of Customs, refused direct appeals from Stewart and from other officials to allow Canadian custom cutters in the United States to move their equipment from job to job with their trucks and trailers. He insisted that Canadian harvesters hauling custom combines and crewmen in trailers and trucks would violate laws requiring duties on foreign vehicles transporting merchandise or passengers. There seemed to be no way to explain the nature of custom combining to Johnson, to convince him that the machines and men transported were tools and employees, not merchandise and passengers.[10]

Other difficulties also arose. Officials of the Immigration and Naturalization Service were reluctant to waive such petty regulations as those requiring physical examinations and identification photographs. Not until August 10 could American consuls in Canada announce that the

way was open for Canadian custom cutters to move south, and by then it was too late. At the same time many farmers in western Canada suffered crop failures. Few American combines entered Canada, for little work was available there. Only eleven custom combines crossed the border from Canada to the United States in 1943; six crossed from the United States to Canada.[11]

For two years attempts to facilitate the international movement of custom cutters had failed. Part of the blame lay with stubborn administrators who resisted change, but more telling was the failure of nearly all official parties concerned to understand the possibilities of custom combining. They thought of the combine exchange as a limited movement of a few machines within a few miles of the border, not as a sustained campaign stretching from the southern plains to the prairie provinces.

Negotiations in 1943 nevertheless produced progress in developing procedures. American and Canadian officials made the terms of the exchange formal in an agreement. American custom cutters applied to the state war board chairman of North Dakota for certification to enter Canada. He issued them papers that passed them through any port of entry in North Dakota or Montana. Canadian custom cutters received certification from various officials in their provincial departments of agriculture. All employment was arranged by the placement services of the states and provinces. The agreement of 1943 became the basis for negotiations in 1944.[12]

In 1944 representatives of both governments sought to improve on past performances. Officials of the United States Office of Foreign Agricultural Relations were eager to conclude negotiations early in the

spring so that Canadian harvesters might help garner a bumper crop on the southern plains. They urged opening the borders to custom cutters by May 1. Their attempts were futile; not until May 26 did their representatives sit down with people from the Department of State, the Immigration and Naturalization Service, and the Canadian legation to arrange an exchange of custom combines in 1944. This time and every year thereafter the combine exchange was authorized by a simple exchange of notes between the United States Department of State and the Canadian Department of External Affairs. No official openly opposed terms of the exchange in 1944 as had some in 1943, but obtaining necessary consents from various agencies delayed opening of ports to Canadian custom cutters until July 7--again too late for Canadians to join in the harvest on the southern plains.[13]

When finally implemented, the terms under which custom cutters crossed the border were liberal. Certification of custom outfits for passage was much the same as in 1943, except that the certifying agent in North Dakota in 1944 was the chairman of the state agricultural conservation committee. All ports of entry in the wheat belt were opened to custom cutters, and officials on either side of the border aided custom cutters in obtaining rationed supplies. Confusion and tardiness in the procedures, however, kept the movement of combines small again. Twenty-six combines entered the United States from Canada; four entered Canada from the United States.[14]

In 1945 the officials concerned finally succeeded in making the exchange of combines work. The Department of State and the Canadian legation exchanged letters in April to authorize the program for 1945. The letters provided for the opening of ports to custom cutters on

June 1, early enough for Canadian combiners to go south and enter the harvest in Kansas and even Oklahoma. Regulatory obstacles had been removed the previous year. By late May ambitious Canadian combiners were waiting on the border for clearance into the United States. The provincial departments of agriculture, recognizing that there would be many applicants to go south, designated numerous local officials as competent to certify harvesters for passage across the border.[15]

Although few Americans entered Canada to harvest in 1945, Canadian custom cutters received significant benefits from the arrangement for the first time. No agency kept a comprehensive record of the number of Canadians who went south to harvest, but J. E. Snowball, chief clerk of farm labour in the Saskatchewan Department of Agriculture, made a thorough survey of custom combiners from Saskatchewan who worked in the United States. He found that of 207 custom combiners issued permits to enter the United States, 151 made the trip. About 485 men were involved in the movement. The Canadians cut an average of 851 acres to each combine in the United States, with an average gross income for combining of more than $3,000. Including revenue for hauling, the Canadians together earned more than half a million dollars.

Only a few Canadian machines ranged as far south as Texas or Oklahoma, since they could not enter the United States before June 1, but perhaps two hundred reached Kansas in time to collect bonanza rates harvesting a fine crop. Most of the Canadians then harvested their way through Nebraska and South Dakota and headed home, skipping over North Dakota and Montana in order to reach their own farms in time for harvest.[16]

Canadians making the harvest in the United States reported a host of problems, the greatest of which was rain, which struck them in Kansas and discouraged some before they were well started. Others learned lessons of management from difficulties in 1945. They discovered that for an extended campaign in the harvest, they needed new machinery, for they found it hard to obtain parts for old combines that broke down. Some attempted to ship their equipment to the southern plains by rail and pick it up there, but ended up spending most of June waiting for their combines. Many mourned the difficulties they had with their hired workers, especially when liquor was involved. The workers knew that their employers had little choice but to keep them on no matter what they did, for they were isolated in the middle of the United States. Custom cutters learned to pick their crewmen more carefully. "They have to be on the job, dependable and non-drinkers," advised one combiner from sad experience. "If one man starts drinking, the rest do the same." The most troublesome problem was that of Joseph Lambrecht, of Ceylon, Saskatchewan. He was held up with his outfit at the border for eight precious days because he was born in Germany.

Despite these difficulties, most Canadian custom cutters exulted over their success in 1945 and looked forward to better years to come. "I consider that we rendered sincere service to these people /farmers in the United States/ and they in turn treated us royally and paid us well. Personally I hope a similar arrangement is carried out next year," wrote one. Another added, "It is a very good thing for Canadian farmers. Besides keeping high priced machinery working you learn a lot about the conditions of the American farmer which certainly treat you

like a brother." Many indicated that they had arranged to work for the same farmers in 1946 if allowed to come back.[17]

The successful season of 1945 inspired Canadian officials to seek permanent establishment of the exchange of combines. The original arrangement, it was generally understood, had been for the duration of the war. In August of 1945 an under secretary of external affairs in Ottawa wrote to the American ambassador to Canada that his government wished to extend the system indefinitely. For the first time a Canadian official at a high level expressed understanding of the nature of custom harvesting by referring to it as an extended seasonal movement. The writer pointed out the benefits the United States already had received in 1945 in help with the harvest, but also noted that custom combining was an opportunity for farmers in western Canada experiencing crop failures to supplement meager incomes. "It would be a simple matter to extend these mutual benefits into the postwar period," he concluded.[18]

Accordingly, the next spring the respective governments again exchanged letters to authorize international movement of harvesters. Arrangements were completed early in the spring, and so the Immigration and Naturalization Service admitted custom cutters from Canada as early as May 15. Altogether about 460 custom combines entered the United States from Canada in 1946, a great increase over 1945. 358 combines came from Saskatchewan. Based on the returns of 263 of them, they cut an average of 970 acres to a combine in the United States, for an estimated total of nearly 350,000 acres cut by all units from Saskatchewan. They earned more than a million dollars in the United States for combining alone, not counting charges for hauling. Nearly a

third of their work was in Kansas, but they also covered much acreage in Oklahoma, Nebraska, and South Dakota.[19]

The movement of combines swelled to its peak in 1947. The Canadian Department of External Affairs once again exchanged notes with the American Embassy in Ottawa to authorize the arrangement. Eager custom combiners from Canada, flushed and impressed by the profits of 1946, clamored for papers to pass them across the border on May 25, the date set for opening the ports to custom cutters in 1947. The Farm Labour Division of the Saskatchewan Department of Agriculture demonstrated its willingness to help them by sending its secretary, Roy Fysh, to Kansas to meet with representatives of the state extension services. Fysh, greeted warmly by state extension directors who hoped to recruit combines from Saskatchewan for their harvest, assured them that Saskatchewan was willing to supply all the combines they wanted.[20]

Canadian custom cutters were only too willing to back up Fysh's pledge. The United States Extension Service first notified Canadian officials that they should certify 300 custom combines to enter the United States. Canadian applicants for certification far exceeded that number, and so officials of the Canadian Department of Agriculture devised a system of quotas, alloting numbers of combines to be certified to the provinces according to the number who had come from each the previous year. More than three-fourths of the machines therefore were to come from Saskatchewan, the rest from Alberta and Manitoba. Officials of the Farm Labour Committee in Saskatchewan also devised a point system to decide what individuals should be granted passage, with preference given to veterans of the armed forces, custom cutters who had combined in the United States before, and most of all, farmers from districts struck by drought.

As the harvest progressed into Kansas out of Texas and Oklahoma, where there were sufficient combines in 1947, directors of state extension services in the central plains grew panicky. Combines were in seriously short supply. Bernard Joy, deputy director of the federal Extension Farm Labor Program, remained calm, for he knew that once the harvest moved past Kansas, demand for combines would decrease. Nevertheless, he said, "reports of probable loss of wheat because of a shortage of combines will be general, and possibly hysterical," and so the federal Extension Service gave in to pressure to admit more Canadians. They ordered 150 more combines on June 6, 300 on June 16, 150 on June 23, 100 on June 24, and 200 on June 27. Most of the orders were filled by waiting custom cutters, but the last order was so late that few custom cutters still were willing to start south.[21]

649 combines from Saskatchewan worked in the United States in 1947, out of a total of about 1,100 from Canada. The 649 from Saskatchewan cut an average of 860 acres apiece in the United States, more than half a million acres in all. Once again about a third of the acres were in Kansas. Earnings of harvesters from Saskatchewan in the United States totaled more than three million dollars for combining and hauling.[22]

The availability of work in the United States and the restrictions on the numbers of combiners allowed to enter tempted some custom cutters to slip across the border illegally. American officials, knowing the need for combines, were reluctant to take action against the offenders. Two men from Saskatchewan, D. A. Graber and V. C. Johnson, took a combine across without a permit and headed for Texas. Worse yet, this was the second year in a row they had done so. Farm Labour officials in Saskatchewan learned that Graber and Johnson were harvesting flax

near Beeville, Texas, and so they insisted that federal extension officials see that the two were sent home. Members of the Border Patrol Unit at San Antonio accosted the combining culprits in the field. Although the two did not have the papers they should have had from officials in Saskatchewan, they did have identification cards from the United States Immigration and Naturalization Service. The Border Patrol therefore left them to work undisturbed.[23]

The international movement of harvesters had reached its peak in 1947. In succeeding years Canadians continued to come to the United States to harvest, but never again in such numbers. Partly this was the result of the general depression in the custom cutting business starting in 1948, and partly it was because American officials, no longer faced with shortages of combines, did not need to appeal to Canada for harvesters.

The combine exchange continued on its own momentum, however, because Canadian officials wanted their custom cutters to have the chance to work in the United States. In 1948 the United States Employment Service replaced the Extension Service as the agency in charge of the placement of custom cutters. That year the Employment Service unwisely authorized the Saskatchewan Department of Agriculture to certify 800 custom combiners for entry into the United States. No record was kept as to how many actually came, but those that did faced a discouraging season with small demand for their services. In 1949 the Employment Service requested no combines at all. A few special cases were admitted, for instance, a man who had invented a new flexible reel for combines and wanted to test it.[24]

In succeeding years the Canadian and American governments continued to exchange notes authorizing an exchange of combines each year, but the number of combines permitted to enter the United States never was large, and hardly any Americans harvested in Canada. Nevertheless, because throughout this time there was a surplus of custom combines, custom cutters in the United States protested the entrance of any Canadians at all. Canadian combiners no longer were needed to save crops; they were admitted as a courtesy to Canada. Because they were foreigners, American harvesters made them scapegoats for their problems. Americans said that the Canadians cut prices below the going rate to secure work. Spring wheat farmers, they said, had nothing to do at home anyway, and so they were willing to stay in the United States and work for lower rates than would Americans. Custom cutters from Canada, enjoying tax exemptions on machinery granted to Canadian farmers by their government, held unfair advantage over American operators. The rumor even spread that Canadian custom cutters were paid subsidies by their government for every acre they cut in the United States.

Except for the rumor about direct subsidies, all the complaints about Canadians in the business voiced by American custom cutters were at least partially true. However, after 1948 the Canadians never were numerous enough to pose a threat to the business of American custom cutters except in isolated, individual cases. Around 1970, when custom combining was at the bottom of a twenty-year depression, American custom cutters began passing around petitions to their congressmen, asking that the admission of Canadian custom cutters be ended. This was the reason that the Economic Research Service of the United States Department of Agriculture embarked on a major study of custom combining

in 1971--to see how much of a threat the Canadian operators posed. The researchers found that 116 Canadian outfits worked in the United States in 1971, using 175 combines. The Canadians harvested a total of 435,000 acres of wheat. That acreage constituted only 1.3% of the acreage in wheat on the plains, while interstate custom cutters from the United States harvested 31.1%. Although there no doubt were instances of price-cutting by Canadians in some places, the study concluded that the Canadians were too insignificant to be much of a threat. The study found that the most potent competition to interstate custom combiners came not from Canadians, but from intrastate custom cutters--farmers who combined for their neighbors after finishing their own crops.[25]

The Canadian custom cutters after 1948, then, despite some controversy, were nothing more than a tiny, colorful addition to the ranks of custom harvesters. The "Canucks" always were an object for comment around grain elevator offices and implement dealerships; a dealer who said that "lots" of the Canadians worked in his area of the country usually meant that he had seen a couple of outfits during the time he had been in business. Custom cutters sometimes made fun of the Canadians, who could be recognized, they said, by the insulated caps they wore in Texas in June.

The early history of the exchange of combines between the United States and Canada demonstrated the difficulty of extending an adaptation to a geographical environment across an international border. During the years when custom combining became established in the United States, its advantages in the efficient use of machinery were obvious. Shapers of policy for agriculture therefore hoped to extend these advantages to their logical limits, to the most northern reaches of the

wheat belt. It proved difficult because of entrenched bureaucracies. By the time it was accomplished, it was almost too late; the need had passed. The harvesting season in the United States was long enough to support professional custom cutters within its own borders, and after 1947 they handled the crop with no trouble. Canadian operators came to be viewed as invaders, not as helpers. There were practical limits to the expansion of custom combining, and the international border was one of them.

FOOTNOTES

[1]"Organized Movements of Seasonal Workers in Agriculture," Labour Gazette, Vol. XLIX, No. 7 (July, 1949), pp. 834-836, 838-839.

[2]J. E. Snowball to M. E. Hartnett, June 18, 1946, numerous claims on Saskatchewan Department of Agriculture for compensation for transporting harvesting machinery, list of individual claims paid in 1945, all in Archives of Saskatchewan.

[3]"Co-operation Between Canada and United States in Harvesting of Crops," Labour Gazette, Vol. XLVII, No. 12 (December, 1947), pp. 1760-1761; "United States and Canada Collaborate in Harvest Work," Foreign Agriculture, Vol. VI, No. 9 (September, 1942), pp. 340-341.

[4]White House press release, April 10, 1942, copy supplied by European-Canadian Desk, United States Department of State, Washington, D. C.

[5]A. C. Devaney, memorandum, July 6, 1942, D. F. Christy to Lemuel B. Schofield, July 7, 1942, both in File 56078.591, records of the Immigration and Naturalization Service, United States Department of Justice, Washington, D. C.

[6]T. M. Shoemaker, order of July 13, 1942, Lewis B. Schofield to Cordell Hull, July 14, 1942, Adolf V. Berley to Francis Biddle, July 17, 1942, "United States and Canadian Ports of Entry for Receiving Grain Harvesters and Machinery," undated, all in File 56078.591, Immigration and Naturalization Service.

[7]"To State Directors of the United States Employment Service in Montana, North Dakota, and Minnesota," undated, ibid.

[8]E. E. Adcock to the Commissioner of Immigration and Naturalization, September 18, 1942, ibid.; W. W. Dawson to George V. Haythorne, January 7, 1943, W. W. Dawson to Don Larin, September 24, 1942, both in records of the Saskatchewan Department of Agriculture relating to the exchange of combines with the United States, Archives of Saskatchewan.

[9]D. W. Brewster to the Commissioner of Immigration and Naturalization, April 1, 1943, D. W. Brewster to the Commissioner of Immigration and Naturalization, April 12, 1943, E. E. Adcock to the Commissioner of Immigration and Naturalization, April 28, 1943, all in File 56078.591, Immigration and Naturalization Service.

[10]J. G. Parsons, memorandum of conversation, June 9, 1943, Records of the Department of State, File 811.504 Canada, National Archives and Records Service, General Services Administration, Washington, D. C.; Administrator of the War Food Administration to William Johnson, June 16, 1943, William Johnson to Administrator of the War Food Administration, undated, both in files on Foreign Agricultural Relations, Canada-U. S. Harvest Labor Exchange, Record Group 224, National Archives and Records Service.

[11]A. W. Klieforth to the Secretary of State, August 19, 1943, Paul Armstrong to the Commissioner of Immigration and Naturalization, December 24, 1943, D. W. Brewster to the Commissioner of Immigration and Naturalization, December 28, 1943, all in File 56079.591, Immigration and Naturalization Service.

[12]War Food Administration, United States Department of Agriculture, Agreement for Movement of Grain Harvesting Labor and Machinery Between the United States and Canada (1943).

[13]J. W. Willard to L. A. Wheeler, February 26, 1944, files on Foreign Agricultural Relations, Canada-U. S. Harvest Labor Exchange, Record Group 224, National Archives and Records Service; Special Memorandum 90, undated, File 56078.591, Immigration and Naturalization Service.

[14]National Selective Service Regional Circular No. R, June 21, 1944, records of the Saskatchewan Department of Agriculture relating to the exchange of combines with the United States, Archives of Saskatchewan; -- Jordan to Joseph Savoretti, February 20, 1945, File 56078.591, Immigration and Naturalization Service.

[15]Joseph Savoretti, memorandum for Board of Immigration Appeals, May 18, 1945, Edward T. Wailes to Herbert H. Landon, May 5, 1945, John Stewart to Robert H. Robinson (telephone call), May 26, 1945, all in File 56078.591, Immigration and Naturalization Service.

[16]J. E. Snowball to M. E. Hartnett, June 18, 1946, records of the Saskatchewan Department of Agriculture relating to the exchange of combines with the United States, Archives of Saskatchewan.

[17]J. E. Snowball, list of custom combiners from Saskatchewan working in the United States in 1945, ibid.

[18]Ray Atherton to the Secretary of State, August 24, 1945, File 56708.591, Immigration and Naturalization Service.

[19]L. A. Wheeler to Herbert H. Landon, undated, Lewis Clark to the Secretary of State, April 18, 1946, both in ibid.; George V. Haythorne, memorandum to H. R. Richardson, M. E. Hartnett, and R. M. Putnam, April 26, 1946, Roy E. Fysh to Dominion-Provincial Farm Labour Committee, November 12, 1947, both in records of the Saskatchewan Department of Agriculture relating to the exchange of combines with the United States, Archives of Saskatchewan.

[20]Thomas W. Holland to Argyle Mackey, May 16, 1947, Ray Atherton to L. B. Pearson, May 19, 1947, both in File 56078.591, Immigration and Naturalization Service; "Report of Conference with U. S. and State Officials on Harvest Labour Held at Dodge City and Hays, Kansas, on April 29 and 30, 1947," records of the Saskatchewan Department of Agriculture relating to the exchange of combines with the United States, Archives of Saskatchewan.

[21]G. H. McGee to H. R. Richardson, R. M. Putnam, and E. E. Brockelbank, April 24, 1947, Roy E. Fysh to Dominion-Provincial Farm Labour Committee, undated, both in records of the Saskatchewan Department of Agriculture relating to the exchange of combines with the United States, Archives of Saskatchewan; Bernard Joy to M. L. Wilson, July 2, 1947, attachment to Leker, Farm Labor Program for Wheat and Other Small Grain Harvest in the Great Plains States, 1943 to 1947.

[22]Roy E. Fysh to Dominion-Provincial Farm Labour Committee, November 12, 1947, E. E. Brockelbank to R. M. Putnam, January 27, 1948, both in records of the Saskatchewan Department of Agriculture relating to the exchange of combines with the United States, Archives of Saskatchewan.

[23]J. R. Bunn to J. B. Kidd, May 22, 1947, unheaded memorandum, June 6, 1947, memorandum to District Director of the Immigration and Naturalization Service in San Antonio, June 18, 1947, all in File No. 56078.591, Immigration and Naturalization Service.

[24]R. H. Robinson, memorandum, July 2, 1948, A. W. Motley to Willard F. Kelly, July 28, 1949, both in ibid.

[25]Lagrone and Gavett, Interstate Custom Combining on the Great Plains in 1971, pp. 2-3.

CHAPTER IX

CONCLUSION

In the spring of 1944 the initial boom in custom combining was in full swing. Thousands of eager opportunists were carving places in the movement, reaping the windfall profits of that time of emergency. Irvin Zecha, the son of a farmer from near Great Bend, Kansas, resolved to claim his share of the action. In the local newspaper he saw an advertisement of a used Gleaner combine for sale. He answered the ad, but when he arrived at the home of the man with the combine, the man told him to save his money. According to notice in the day's newspaper, Zecha had been reclassified 1-A by the Selective Service.

Zecha quickly enlisted in the Navy, and he served two years, but he did not abandon his ambitions of becoming a custom cutter. While still in the Navy, he sent money to his father to buy him a combine. His father bought him a twelve-foot Baldwin machine with steel wheels and chain drive. Leaving the Navy in May, 1946, Zecha came home and borrowed enough money to buy a 1934 John Deere tractor, also on steel wheels. The combine had cost $900, the tractor $275. Then he bought a 1934 International truck with no glass in it at all, not even headlights. He wired a makeshift windshield on the cab and built a wooden bed on the platform. Zecha and his brother then began custom harvesting near Claflin, a few miles from Great Bend. They cut for some days before finishing their first job. The final day they were

down to their last thirty cents, and so lunch was just a candy bar. Then came the first check, and an infant business was saved.

In the spring of 1976 the second great boom in custom combining was at its height. Irvin Zecha loaded up his outfit to begin his thirty-first year of custom cutting. He wheeled three twenty-four-foot Gleaner combines onto trailers drawn behind two tandem-axle trucks and one bobtail truck. Marie Zecha, Irvin's wife of twenty-nine years, moved their effects into a spacious house trailer. Four sons and a hired man climbed into the trucks and headed south for Chattanooga, Oklahoma. There Zecha harvested for a farmer he had served for nineteen years. The outfit moved to Wakita, Oklahoma, and cut the wheat of a man Zecha had worked for eleven years. The next stop was Great Bend, where Zecha had cut for local farmers since 1946. Ordinarily the fourth stop would have been Cheyenne Wells, Colorado, where Zecha had combined for a man since 1948, but in 1976 drought had caused crop failure there. So the outfit moved directly to Oneida, South Dakota, to work on a mammoth farm with 8,500 acres of winter wheat, the owner of which had employed twenty-one custom combines the year before. The last stop was Carrington, North Dakota, harvesting for a customer of sixteen years. Finishing the wheat there, most of the family returned home, while Irvin Zecha stayed on with two combines and local help to harvest sunflowers. Finally he also went back to Great Bend, where he harvested a bit of corn in the late fall.[1]

Zecha in 1946 and Zecha in 1976 posed an incongruous pair of images. A shirttail operation held together by baling wire and high hopes evolved into the established business of a substantial capitalist. The wonder of the transformation was not that one individual had

succeeded, but that he represented a great class of such individuals who made up the business of custom combining.

If custom cutting began as a business of opportunists, it became an industry of stubborn individuals. In these people there was broadness of vision. No pettiness was among them, no narrowness borne of isolation. Such characteristics disqualified a man for custom cutting, which demanded imagination and foresight and exposed its participants to the lives and work of people in many different locales. Custom cutters practiced shrewd management and performed wearying tasks, but few remained in the business unless there was a spark of romance in them, making them love an occupation so often perverse.

The rewards of custom combining to its participants, be they financial or spiritual, were of concern only to a few thousand custom cutters. Their lives were interesting and unusual, but viewed in isolation, not important to the rest of the world. In their context, however, they played an important role in the agricultural economy of the plains. Without custom cutters the wheat harvest, the climax of the agricultural calendar on the plains, would have been difficult in the best of times, unmanageable in the worst. Custom combining filled a need of farmers in a particular environment as surely as did Turkey wheat, dry farming, custom threshing, or any of the other adaptations employed by farmers on the plains.

It was this quality of adaptation that made custom combining of interest to the historian or geographer of the Great Plains. Most interpretation of the history of the Great Plains has flowed in the backwash of Walter P. Webb's <u>The Great Plains</u>, exploring the ways in which inhabitants of the region adapted or failed to adapt customs and

institutions to suit their environment. As representatives of the process of adaptation, custom combiners made Webb's Texas Rangers look like pikers. Custom cutters were plainsmen nonpareil. They brought order, flexibility, and mobility to the harvest. They applied capital, labor, and expertise to the work, but only when and where it was needed.

Custom combining did not exist merely for the benefit of its practitioners; it provided economic benefits for farmers and fit into a scheme of institutions suited for life on the plains. This was what gave the industry staying power. It also ensured that custom combining, unless replaced by a still better innovation, will remain a part of agriculture on the Great Plains.

FOOTNOTES

[1]Personal interview, Irvin Zecha.

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