

Custom Combining in North Dakota

By Thomas D. Isern



Essential participants in the annual **wheat harvest** on the Great Plains are custom combiners, itinerant wheat harvesters who transport their combines, trucks, and house trailers with them to their places of work. The pilgrim capitalists who assemble and manage such caravans are paradoxical (contradictory) people. Each is a substantial businessman who handles hundreds of thousands of dollars of capital investment. Each is also an itinerant who rushes to greet summer in Texas or Oklahoma and returns to meet autumn in Montana or North Dakota. The mobility of custom combiners not only makes them a colorful part of the agricultural history of the Great Plains but also helps them to meet the economic needs of farmers. The custom men supply farmers with seasonal labor, with technical expertise, and most important, with harvesting machinery, one of the most critical of capital investments in modern agriculture on the plains. Custom combining is important to North Dakota both because farmers in the state depend on it for these services and because custom men from within the state take the same services into other states.

Custom combining is an agricultural adaptation suited to the Great Plains. Methods of harvesting and threshing small grains in North Dakota and the plains traditionally have reflected the distinctive geography of the region. Prior to the adoption of the combine, farmers here hired custom threshing outfits and employed migrant laborers who moved north with the harvest. Farmers embraced the combined harvester, or **combine**, during the 1920s only after manufacturers offered prairie models of size and construction to suit their needs. Prairie model combines, drawn at first by horses

but generally adopted only after the advent of the gasoline tractor, usually cut swaths of from twelve to sixteen feet. They carried auxiliary engines that powered the cutting and threshing machinery, rather than depending on a ground wheel for such power. Farmers at first used them only for **straight-cutting**, that is, cutting and threshing ripe wheat as it stood in the field.

In North Dakota and the rest of the spring wheat region, however, most farmers refrained from using combines until in 1927 manufacturers developed



Figure 1. These custom combiners are preparing to harvest a field of wheat in North Dakota. They are using Massey-Harris combines, circa 1950s. (SHSND A3967)

windrow harvesters, or swathers, to be used in conjunction with combines. The **swather** could be used to cut and windrow wheat of uneven ripeness. The combine, fitted with a pick-up attachment to handle windrows, followed later to pick up the windrows and thresh them. Although economic depression subsequently slowed implementation of the combine during the 1930s, its eventual acceptance had been assured by the development of the windrower.¹

A study of the harvest in North Dakota by the United States Bureau of Agricultural Economics in 1938 showed that in sample counties spread across the state still only 25 percent of the acreage in small grains was being combined. About half of this was straight-cut as it stood, and about half was picked up from the windrow. Farmers in the drier southwestern counties were quicker to abandon the binder for the combine and to practice straight-cutting than were those elsewhere in the state. Farmers in the northern and eastern counties, when they used the combine, generally also used the windrower.²

The same study noted the presence of “a distinctively new type of harvest arrangement—fully equipped combines and crews from Kansas and Oklahoma”—**itinerant custom combine outfits**. Since the coming of the combine to the Great Plains, owners of the machines had done custom work for their neighbors, but only a few combiners of the 1920s and 1930s had attempted to take their machines on the road and travel with the harvest. The authors of the study in 1938 called the effect of such interstate custom combiners “problematical” and predicted that they never would be important.³ Within a few years, however, the emergency conditions of World War II would cause a rapid development of the custom combining business in North Dakota and in the Great Plains. Custom combining would hasten the transition to use of the combine in North Dakota and would become a permanent part of the annual wheat harvest throughout the Great Plains.

Several conditions contributed to the mushrooming of the industry. Conscription and the availability of defense work diverted the previously dependable stream of cheap harvest labor that annually had

Figure 2. A custom combining outfit gathers on the grounds of the State Capitol in Bismarck, ready for the 1950 harvest. (SHSND A2329)



flowed from the Mississippi Valley onto the plains for harvest. This made mechanization imperative, and demand for combines was greater than ever, especially in areas like North Dakota that had not yet generally adopted the machine. Unfortunately, from 1942 through 1944 the war production boards of the United States and Canada cut allocations of steel for the production of farm machinery. In 1943 manufacturers in the United States produced only about 29,000 combines, barely half as many as in 1941. Moreover, farmers were growing more wheat than ever, responding to high prices and to appeals from the United States Department of Agriculture to raise more grain in support of the war effort. Only a few farmers were fortunate enough to obtain purchase certificates for combines from their county war boards, which allocated farm machinery. The rest found combines available only on a fantastic black market in which dealers on the southern plains bought combines after harvest and shipped them north for resale in the Dakotas.⁴

In response to such circumstances, enterprising interstate custom combiners took to the roads. The movement began to swell in 1942. Researchers in Nebraska in that year noted the presence of at least 447 custom combines from outside the state. The movement intensified during the later years of the war and the years immediately following the war, as wheat farmers produced to supply prostrate Europe and manufacturers remained unable to fill farmers' orders for new combines. In 1947 at least 5,117 custom combines entered Nebraska; 7,800 or more came to Kansas. The years 1942–1947, thus, were the boom years for custom combining, offering wondrous profits to its participants. Paul Swanson of Devils Lake, North Dakota, for instance, bought two combines in 1942 and took delivery of them in Enid, Oklahoma. From there he harvested his way north. He had paid for the two combines from his profits before he had left Kansas. Through 1947 he consistently netted \$5,000 per combine in the harvest.⁵

The sudden growth of custom combining was especially remarkable because it preceded the general adoption of the **self-propelled combine**.

Massey-Harris had produced the first practical self-propelled combine, the No. 20, in 1939 and had followed quickly with an improved model, the No. 21. No appreciable number of farmers obtained the machines for several years, though, because little steel was allocated to produce them during the war. Most early custom combiners therefore struggled with the transportation of **pulltype** (also called “drag”) machines and tractors. Some custom men pulled the combines down the highway with the tractors. The majority loaded the tractors onto trucks and towed the combines behind.⁶ Increased numbers of self-propelled combines appeared in the harvest from 1944 on. In that year Massey-Harris obtained allocations of steel to produce an extra five hundred No. 21's, each of which the company sold to a custom combiner. Massey-Harris reaped a wonderful crop of publicity from the efforts of these operators, whom the company dubbed “**the Massey-Harris Self-Propelled Harvest Brigade.**” After the war had ended, many more Massey-Harris No. 21's and No. 27's were available, along with comparable models from the other major implement companies. By the mid-1950s nearly all custom men had self-propelled machines.⁷

The boom in interstate custom combining collapsed in 1948 and 1949 as prices for wheat declined and shortages of harvesting machinery ended. There followed twenty-five years of adjustments and general hard times for custom combiners. Rates for combining usually were low because the supply of custom combines nearly always exceeded demand.

The business survived for two reasons. The first was that its participants were committed to it economically, as an investment of capital, and emotionally, as a style of life. Custom harvesting became not just a lifelong occupation, but also a tradition passed through the generations, much like farming.

The second reason was that custom combining was an appropriate institution for the Great Plains, meeting the needs of farmers in the region. The high risk involved in agriculture on the plains

impressed on farmers the need for flexibility in their operations, especially in the utilization of capital. Many realized that it was more prudent to hire custom harvesters, who had to be paid only when there was a crop to harvest, than to buy combines, which depreciated whether there was a crop or not. Custom cutters performed a minor portion of their work for small landowners who simply had too little acreage to justify even considering the purchase of a combine, but this sort of job was done mainly to preserve old friendships or to fill idle time. The bulk of the employment of interstate combine outfits came from large farms devoted mostly to wheat, the owners of which deliberately chose to decline purchasing their own combines.

Those custom harvesters who survived the lean years won rich rewards during the mid-1970s.

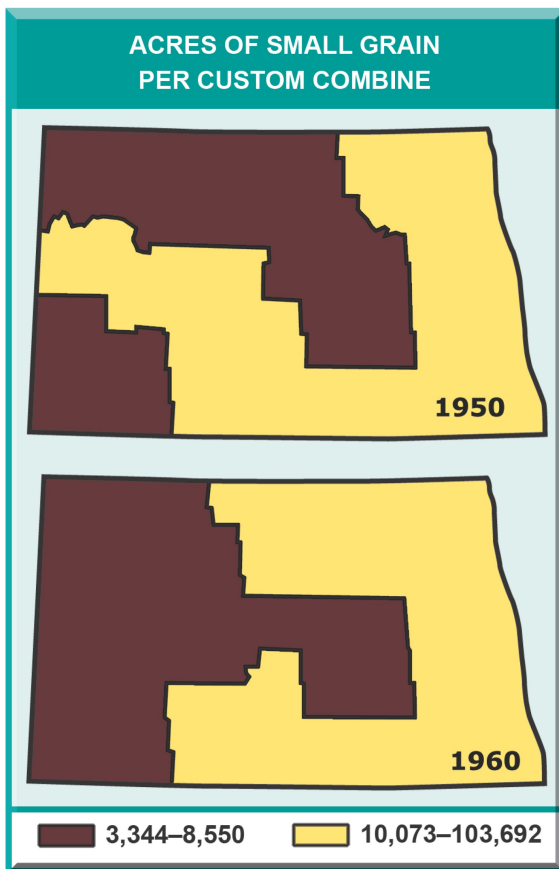


Figure 3. Out-of-state custom combining and acres of small grain per custom combine, 1950 and 1960. (Graphic by Cassie Theurer)

From 1973 through 1976 rates for combining soared because the rising price for wheat allowed farmers to pay higher rates and because spiraling prices for combines discouraged farmers from buying them.⁸

Trends in custom combining in North Dakota through these years generally paralleled those of the Great Plains as a whole. Owners of combines from North Dakota joined the stream of itinerant combiners, although they were few in number at first: among the custom combines in Nebraska in 1942 researchers counted but eleven from North Dakota, or 2.5 percent of all machines from outside the state. Among the custom combiners from out-of-state in Nebraska in 1947 were 203 outfits from North Dakota, or 6.8 percent of the total.⁹

At the same time, combiners from outside North Dakota found work within the state. According to estimates by the United States Agricultural Extension Service, North Dakota in 1945 utilized 1,634 combines from outside the state. The number of out-of-state combines reached its peak in 1947 at 2,958. Among these were hundreds of Canadian outfits that entered the country under a reciprocal agreement made in 1942 between the United States and Canada to allow passage of harvesting outfits across the border. This was especially fortunate for farmers in North Dakota, because the Canadian combiners, unlike those from the southern plains, already had pick-up attachments for their combines.¹⁰

During these boom years the Agricultural Extension Service provided placement services for custom combiners in all but one of the states of the Great Plains. This was part of a general pattern of governmental assistance to custom combiners that also included nearly unlimited priority to purchase the rationed tires and gasoline necessary for custom harvesting. North Dakota was the only state in which the Extension Service did not deem it necessary to assume control of placement services in order to ensure efficient movement of combines where they were needed. The North Dakota State Employment Service had operated an extensive

program for placing harvest labor since 1937; as a result, officials of the state extension service contracted with the state employment service to continue handling harvest labor, including custom combine outfits.

The head of the placement system was a state farm labor supervisor appointed by the director of the North Dakota Employment Service. The farm labor supervisor directed the work of farm labor officials in all the service's regular regional offices and in several temporary offices opened for the duration of the harvest. These farm labor officials in turn coordinated the activities of several hundred volunteer farm labor representatives in as many towns and villages. The volunteers gathered information from farmers as to their needs for combines and distributed reports from the employment service to harvest workers and custom combiners. The volunteers usually were the owners of businesses such as general stores, grain elevators, service stations, restaurants, and saloons. Through them the employment service distributed daily harvest reports—"pink sheets," they were called. The service also issued press releases on the progress of the harvest and placed individual harvest workers and custom combiners on jobs with farmers. The placement system established then continued in similar form to the present.¹¹

The state employment service continued its activities while the boom years of custom combining ended and the process of adjustment to lesser demand began. In 1948 the employment service noted a surplus of combines in the state before harvest even had begun, a surplus eventually numbering at least five hundred combines. Hundreds of harvesters returned home without even making expenses, many of them reduced to peddling tools and tires to buy gas. One bad year was insufficient to stem the surplus, which remained almost as serious in 1949. The employment service pointed out that local ownership of combines was up 50 to 100 percent over 1947. Farmers in North Dakota had more combines of their own and needed fewer custom combines.¹²

YEAR	PERMITS
1970	1,680
1971	1,657
1972	1,405
1973	1,364
1974	1,290
1975	1,378
1976	1,522
1977	1,372
1978	1,186
1979	850

Figure 4. Harvesting permits issued to custom combining operators by the North Dakota Highway Department, 1970–1979. (Graphic by Cassie Theurer)

YEAR	\$/ACRE
1957	\$3.30
1962	\$3.53
1965	\$3.66
1968	\$3.77
1971	\$4.05
1974	\$7.52
1977	\$8.61

Figure 5. Basic rates for custom combining, 1957–1977. (Graphic by Cassie Theurer)

For the next few years the supply of custom combines in North Dakota moved into a rough balance with demand. The director of the employment service noted in 1951 that "securing an adequate number of machines and men to harvest our grain crop has ceased to be the problem it was a few years ago." The service cautioned custom combiners not to come to North Dakota unless they had regular customers already lined up. Custom men generally heeded this advice. In 1956 the director of the employment service observed, "The custom combine movement is so well established that there should be no difficulty keeping this balance of supply and demand next year." The number of custom combines working the state declined until 1961.¹³

An exceptional crop of spring wheat in 1962 reversed the decline. High yields and heavy straw so slowed the harvest that farmers demanded additional custom combines. Although many custom men by this time had become accustomed to turn for home before reaching North Dakota, in response to this special appeal they entered the state and swelled the number of out-of-state combines to 2,550. A similar number came in 1963, but thereafter demand lessened, and a process of adjustment like that of the 1950s ensued.¹⁴

During the 1970s the number of custom combines at work in North Dakota steadily declined, according to an enumeration of custom harvesting permits issued by the North Dakota Highway Department.¹⁵ The exception to this tendency was the two-year period 1975–1976, when a remarkable rise in custom rates attracted additional combine operators. The general trend was not so much a decline in the business of custom combining as a simple reduction in the numbers of men and machines involved. Larger, more efficient combines with greater cutting capacity covered more acres with fewer machines. High costs of machinery and fuel kept new operators from entering the business. Custom combining merely became more capital-intensive, just as did farming.

The extent to which farmers employed custom cutters through the years varied from one part of North Dakota to another. In the earlier years of the business, farmers in the northern, western,

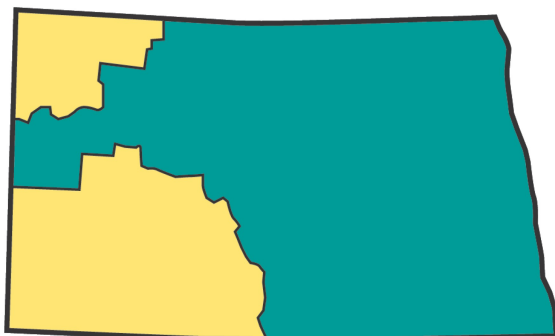


Figure 6. The area shaded in yellow shows counties where the majority of grain is straight-cut. (Graphic by Cassie Theurer)

and central counties all were heavy employers of custom combines. Those in the far eastern and southeastern counties hired fewer. Over the years the pattern shifted somewhat. The northern counties employed fewer custom combines, but the western and central counties remained heavy consumers of custom services.¹⁶ This was part of a general trend that characterized the business all over the wheat belt. Custom combining declined in the eastern plains, where diversified farming and greater rainfall discouraged large-scale custom work, and flourished on the high western plains, as custom operators moved westward in search of larger acreages and drier weather.

The type of combining also varied from place to place. There was more pick-up combining in North Dakota than in any other state of the Great Plains. Custom combiners from the southern plains disliked pick-up work because it was unfamiliar to them and because it required extra equipment. It was one reason why many abandoned North Dakota and moved into Montana. In the southwestern counties of North Dakota, some custom work was available for combiners without pick-up attachments, but elsewhere, they had little hope of finding jobs without them.¹⁷

Nevertheless, most of the custom combiners who worked in North Dakota through the years came from the southern plains, especially Kansas. Oklahoma, Texas, and Nebraska also were heavy contributors of combines for North Dakota. Few came from outside the Great Plains. The influx of large numbers of Canadian harvesters ended after 1948; from 1949 on fewer were allowed into the country.¹⁸

North Dakota also sent numerous participants into the harvest in other states. In 1948 the state employment service reported that at least 209 custom outfits went south from North Dakota to make the harvest. In 1958 the number exceeded three hundred. In 1971 the Economic Research Service of the United States Department of Agriculture gathered information about 3,431 custom outfits operating in ten states of the Great Plains.

Most of these came from the southern plains, but 232, not quite 7 percent of the total, originated in North Dakota.¹⁹

Most custom combiners from North Dakota were farmers who left for the south after sowing their own spring wheat and concluded the season by harvesting their own crops. They began part-time custom combining for a variety of reasons. One was the high price of machinery they needed for their own farms; they could afford new machinery only by doing custom work. Some turned to custom combining as a result of the meager returns offered by farming or their inability to acquire new land. Many inherited the business from an earlier generation; they grew up with the harvest.²⁰

In their methods of business, custom combiners from North Dakota resembled those from other parts of the plains. They harvested for a pre-arranged itinerary of farmers from south to north, the stops on the route spaced so as to provide time to reach each job but to leave no idle time between jobs. Custom combiners from North Dakota during harvest of 1979 generally made four to nine stops, including the one at home. Six or seven stops were about the average. The harvesting route of the Ray Zahnow custom outfit from Max, North Dakota, in 1979, was illustrative of the annual itineraries of custom combiners. Zahnow, a veteran of thirty years in the business, covered six stops in three states before returning home to Max.²¹

Written contracts were rare, almost all custom jobs being arranged by simple oral agreement. The custom combiner received payment for work according to a formula that designated charges by three numbers quoted in series. “Eight, ten, and ten,” for instance, meant eight dollars an acre base rate for combining, ten cents a bushel for trucking grain to the elevator, and ten cents a bushel for each bushel of yield more than twenty to the acre.

Through the years, rates for custom combining, as illustrated by those prevailing in North Dakota, rose abruptly—not gradually. During the boom



Figure 7. Harvesting route of the Ray Zahnow outfit, 1979. (Graphic by Cassie Theurer)

years of the mid-1940s, rates usually were three, five, and five or three-fifty, five, and five. Rates did not drop when the boom ended, but neither did they rise for many years. Not until the late 1960s did a base rate of four dollars become common; increases in expenses far outstripped rises in rates. Suddenly, in 1973 rates spiraled upward; by 1976 the going rate was eight, ten, and ten. Rates have risen slightly in succeeding years.²²

The most common size for a custom combine outfit was two machines, except in the earliest years of the business when most outfits had a single combine. In 1969 officials at ports of entry along the southern border of Nebraska counted 188

custom outfits from North Dakota. Eighty-eight of them consisted of two combines; forty-one had just one; thirty-eight of them had three. The largest outfit from North Dakota had six combines. The average was 2.3 combines per outfit. The average among ten outfits from North Dakota working in Montana in 1976 was 2.0 combines per outfit. Custom combiners from North Dakota surveyed by the Economic Research Service in 1971 averaged 2.4 combines per outfit. Often individual owners of outfits grouped together in working partnerships to handle larger jobs. This was especially true of fathers, sons, and brothers.²³

Custom combiners from North Dakota surveyed in 1971 harvested 1,156,511 acres of crops, mostly wheat, an average of about 2,100 acres per combine. Most of the combines cut swaths of eighteen or twenty feet, as compared to twelve or fourteen feet in the 1940s. By 1979 most custom combines had headers of twenty, twenty-two, or twenty-four feet. Throughout the era of custom combining, custom men operated almost no makes of combines except those of three major manufacturers—**Massey-Harris** (later Massey-Ferguson), **Gleaner** (which

became a subsidiary of Allis-Chalmers), and **John Deere**. The success of the pioneering self-propelled models from Massey-Harris made them the early favorites of custom men, but during the 1950s the advantage passed to Gleaner; combiners explained that the compact frame of the Gleaner combine made it easier to transport. John Deere steadily gained on the other two and eventually surpassed them as the favorite of custom combiners, however, largely because the proliferation of local John Deere dealerships made it easy to obtain that company's parts at practically any point in the wheat belt.²⁴

Custom combiners usually took along one grain truck for each combine. Single-axle trucks of the early decades increased in hauling capacity as combines increased in cutting capacity; by the 1970s most custom combiners purchased larger, dual-axle trucks. Except during the war years when vehicles often were unavailable, all custom cutters used pick-up trucks for errands and as service vehicles for hauling light equipment and supplies. Some found it necessary to bring along one-ton trucks converted to service vehicles. Service trucks or pick-ups contained fuel tanks to fill the combines, several thousand dollars' worth of spare parts for the combines, portable air compressors, countless grease guns, all the hand tools customarily used to maintain farm equipment, and sometimes welders and cutting torches. From the late 1960s on, each vehicle or combine carried a citizen's band radio.²⁵

Although in the 1940s many custom men slept under tarpaulins in their truck beds, most soon bought house trailers and took their families on the road with them. By the 1960s nearly all outfits had house trailers, buses, or some sort of mobile lodging.²⁶ The effects of this were more profound than just convenience. During the mid-1940s custom combining was characterized by unattached men not averse to drinking and brawling on rainy days in small towns far from home. With the advent of mobile housing, and the presence of wives and children with the outfits, custom combining quickly became a respectable, family-oriented

1948		1960	
Kansas	318	Kansas	532
Canada	227	Oklahoma	353
Nebraska	162	Nebraska	121
Oklahoma	155	South Dakota	117
Texas	121	Texas	104
Minnesota	64	Missouri	35
South Dakota	58	Minnesota	30
Colorado	32	Iowa	27
Iowa	27	Colorado	27
Missouri	17	New Mexico	16
Montana	17	Arizona	11
California	6	Arkansas	6
Illinois	5	Montana	4
Ohio	4	Wyoming	4
Indiana	2	Other States	7
New York	2		

Figure 8. States of origin of out-of-state combines in North Dakota, 1948 and 1960. (Graphic by Cassie Theurer)



Figure 9. North Dakota is part of the spring wheat region of the Great Plains. For many years, custom combining has been an important part of the annual wheat harvest in the state. (North Dakota Tourism, photo by Jason Lindsey)

pursuit. All members of the family participated in the business, and sons assumed management by degrees. Some outfits already have passed through three or even four generations.

For many families custom combining became a way of life, not just a business. One such is the family of Louie Slominski, who in 1979 operated an outfit of four John Deere combines along a route stretching from Caldwell, Kansas, to his home in Minto, North Dakota. He has custom combined in conjunction with his farming operation since 1961. Although most of his motives are economic, he recognizes the nonmaterial benefits of his business. “Have met many interesting people on the run,” he writes, “Keep up a year round correspondence with some of them. Several of our long-time customers have come up to North Dakota to see us and our farm operation. When [the] time comes we don’t go on [the] run, [we] will miss seeing these folks.” He observes also, “Have gotten to know some fine young fellows who have worked for us over the years. Most will go on [the] run once or twice and then go on to something else, but enjoy working with all. Have seven children and although our three oldest no longer travel with us, feel they have learned an

awful lot about different parts of the country and about different people.”²⁷

Despite the consciousness of a distinctive way of life expressed by Slominski and others like him, and despite the useful services they provide, custom combiners remain mysterious and misunderstood figures. Even residents of small towns on the plains, unable to dispel their early impressions of the wild boom days of the business, persist in a “lock-up-your-wives-and-daughters” attitude when custom outfits come to their communities. Worse yet, writers for national magazines and metropolitan newspapers, although vaguely intrigued by the scope and vigor of custom combiners’ unusual style of life, continually mislabel them as “migrants,” “nomads,” or “gypsies.”²⁸ These appellations hardly square with the reality of hard-working families and capitalists moving reliably and purposefully from one well planned job to another.

Although one custom harvester remarked that “a person has to have guts of steel” to stay in the business, it is apparent that for many, the benefits outweigh the hardships and misunderstandings. Custom combiners have pride in their business. They manage a difficult enterprise, they feel independent, and they

provide services that farmers depend on. The custom combiner is above all a plainsman. Not only does he spend his working life ranging the Great Plains, but his mobility and flexibility make him peculiarly fit to survive in their agricultural economy.

About the Author

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15. See Table 1 for data provided by North Dakota Highway Department, Bismarck. Each permit represents a vehicle transporting a combine from out-of-state.
16. See Figure 1. Adapted from North Dakota State Employment Service, *Farm Labor Report*, 1950, 1960.
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20. Motives for custom combining gleaned from questionnaires filled out for the author by custom combiners from North Dakota.
21. See note #20.
22. See Table 2; data taken from numerous publications on custom rates by the North Dakota Crop and Livestock Reporting Service, Bismarck; additional information on rates is from farm labor reports of the North Dakota State Employment Service.
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27. Quote from questionnaire returned to author.
28. See, for example, "The Gypsies of Harvest," *Newsweek*, Vol. 90, No. 1 (July 4, 1977), pp. 65–66.

