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# Women and Technology on the Great Plains, 1910-40

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> What is in store for the homesteader's wife? Nothing but to deteriorate. . .the homesteader can do nothing but make a scanty living while his wife and family go unclad and scarely fed, with no conveniences in the home, no society, no preaching . . . when you live where you can see sad-faced women, with their children crying about their skirts for things to eat, eager for even a drink of sour milk—good, pretty women, whose hair turns gray in a few weeks of worry over where the work is coming from to buy flour—we then wonder if Uncle Sam couldn't dam the [streams] in western Kansas and supply not only work but water for many who have to haul water 3, 4, and 5 miles . . . and the women have most of that to do the year around. . . . This is not a complaint, but a statement of true conditions in western Kansas.[1]

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These are not the words of a nineteenth-century pioneer but those of a young farm woman talking about her life on the Great Plains in 1913. Although rural plainswomen of the early twentieth century could rely on certain conveniences that their grandmothers had lacked, such as purchased canned goods or hand-cranked clothes wringers, most of them could not rely on the modern mechanical devices used by women in towns and in prosperous and densely populated agricultural areas. Throughout the first half of the twentieth century, farm women on the Great Plains were well aware that their domestic lives did not equal the standards enjoyed by women elsewhere. According to farm life periodicals of the era, this knowledge often led to the development of an inferiority complex among such women and a readiness to adopt those technologies most appropriate to their geographic and economic position.[2] In their attempts to acquire and use modern technology, plainswomen often found that they could not rely on patriarchal institutions—not even

"Uncle Sam." Family politics and the realities of distance and poverty hampered women's efforts to secure modern technology for their farm households. The experiences of farm women living in the plains region of four north-central states—Kansas, Nebraska, North Dakota, and South Dakota—illustrate the technological needs of early twentieth-century plainswomen and the solutions that they adopted.

## Women's Desire for Technology

In the 1930s Walter Prescott Webb argued that during its settlement period the region between the ninety-eighth meridian and the Rocky Mountains attracted men and repelled women. Although subsequent scholarship has often challenged the notion that women found the Great Plains repellent, most scholars agree that men and women did view the plains experience differently. That difference in vision apparently carried over into Webb's own time—at least for residents of Great Plains farms.[3]

Results of a United States Department of Agriculture survey in 1913 indicated that men and women on the Great Plains viewed farm life priorities differently. In particular, female respondents complained that men failed to recognize the economic importance of farm women's work and women's desire for improved domestic and communication technologies. Typical comments included the following by a Kansas woman: "In many homes, life on the farms is a somewhat one-sided affair. Many times the spare money above living expenses is expended on costly machinery and farm implements to make the farmer's work lighter . . . while little or nothing is done for home improvement and no provision made for the comfort and convenience of the women in the family."[4]

According to results of the 1913 USDA survey, a chief complaint of the region's farm women was the lack of a safe, convenient water supply. Although plainswomen expressed concern about health and hygiene, their main reason for wanting modern plumbing was a desire to reduce their own workload. Embedded in their comments about a convenient water supply were complaints about men's indifference to this issue. One Kansas woman asserted that farm husbands often located wells for the convenience of their


FIG. 1. *"Sharples Cream Separator," advertisement,* Nebraska Farmer, 6 *March 1920.* Courtesy of *Nebraska Farmer.*

livestock rather than that of their wives. According to her, farm women often had to carry water one hundred to two hundred yards from the barnyard into the farm home. Another Kansas woman described the plight of farm women, and male indifference, in dramatic language:

> Oh, the weary arms that pump water, carry it down step[s], around the corner, up two steps, through two doors, giving the pail a final hoist to a high shelf, table, or sink. Then the water must be carried out. Few men can see a slop pail. The same arms carry a larger pail, its weight enhanced with floating peelings and kitchen refuse, carry it down the same steps, around the corner, and 4 rods through mud to the pigpen, handily arranged for a lift over a stock fence.[5]

The water supply problem remained a significant one for Great Plains farm women for several decades. As late as 1940, for instance, only 15.7 percent of Kansas farm homes had running water, and 10.5 percent of Kansas farm homes had no water supply at all within fifty feet. The situation of Kansas farm women compared favorably with that of women in other north-central plains states, however. For example, in 1940 only 6 percent of North Dakota farm homes had running water, and 41.1 percent of North Dakota farm homes had no water supply within fifty feet (Table 1).

Arid conditions on the Great Plains further magnified the farm woman's workload in terms of the dust problem that existed there even before the "Dirty Thirties." Without electric vacuum cleaners or an adequate water supply, women's task of keeping the farm home clean was severely hampered. One woman's response to the 1913 survey provides a graphic and insightful picture of the problem:

> I am going to write of the needs of the women of western Kansas. Her greatest difficulty and hardest work and least profit comes with the dust that sweeps over this region and that every high wind drives into every crack and crevice and that penetrates everywhere. Cleaning may be thorough and next day may fill the house from cellar to attic with the fine dirt that continues to sift everywhere. Food is ruined, beds are filled with the choking dust, and the walls and ceiling so loaded that a thorough cleaning is necessary, and it may be just completed when another dust storm is on and the house be filled as bad as ever. Western Kansas, western Nebraska, western Okla-

TABLE 1.
PLUMBING AND LIGHTING FACILITIES IN NORTH-CENTRAL PLAINS
1940 FARM HOUSEHOLD PERCENTAGES

| | Running Water in Unit | No Water Supply within 50 feet | Outdoor Privy | Electric Lighting |
|---|---|---|---|---|
| Kansas | 15.7 | 10.5 | 86.5 | 27.3 |
| Nebraska | 22.3 | 12.9 | 83.8 | 28.5 |
| N. Dakota | 6.0 | 41.1 | 89.8 | 15.5 |
| S. Dakota | 11.8 | 27.8 | 89.9 | 17.9 |

SOURCE: United States Department of Commerce, Bureau of the Census, *Sixteenth Census of the United States, 1940: Housing*, vol. 2, pts. 3, 4, 5 (Washington, D.C.: United States Government Printing Office, 1943).

> homa, and eastern Colorado are all affected in this manner, and many housewives suffer all the time from the effect of this loose moving soil. . . . Too much stirring of the surface soil during dry times seems to be the chief cause, and the remedy will have to be in direct opposition to the cause. Less plowing in dry times and more moisture on the surface of our country. . . . This is the greatest need just now, and it is felt by the populace of a large area of this country.[6]

As these comments suggest, the plainswoman's recognition of her own domestic needs often led to criticism of male behavior—in this case existing farming practices—and to attempts to devise novel solutions to problems that existed on both sides of the farm home threshold. One of the chief problems she perceived within the farm home was the lack of electrical appliances. Farm women particularly wanted to use electric vacuum cleaners, irons, stoves, and cream separators, according to results of the USDA survey. The comments of a Kansas woman are typical of many responses the USDA received:

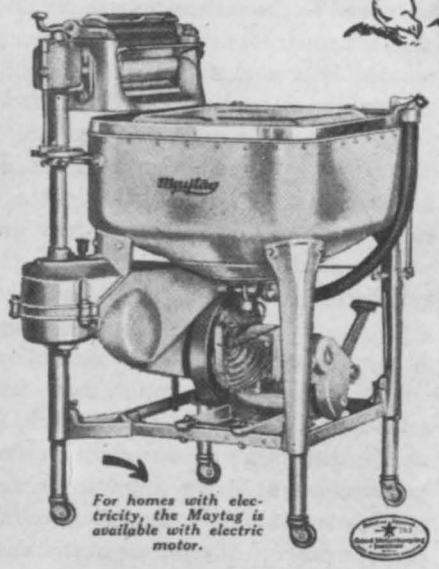
> The thing [the farm woman] needs in this day and time is electricity. Then when her house is lighted, her cream separated and churned, her washing, ironing, and sweeping, her sewing machine run by the same power, and she relieved from the drudgery of washing and filling lamps, lifting and washing jars, pans, and all these other hard old things, she can have some time for a social life and the improvement of her mind. The only way I can see is for the Government to furnish, at a reasonable price, electricity to every farm.[7]

## ELECTRICITY AND THE REA

This woman's proposed solution was the goal of the New Deal's Rural Electrification Administration some twenty years later. In a 1936 speech to farm women, Secretary of Agriculture Henry A. Wallace promised that the REA had their interests foremost in mind: "Science, electricity and city conveniences have lightened the burdens of millions of city women, but the great majority of farm women . . . still face the problems of operating a household with relatively primitive facilities. Fortunately . . . there have been enormous changes. . . . Rural electrification is easing the burden of the farm wife more and more." Indeed, as a result of the REA, plainswomen who had functioned without electricity or who had used their own unreliable generators that primarily powered only small appliances could begin to rely on a dependable power source. In the words of a North Dakota woman, the coming of the REA "really changed [housekeeping], because then we got electric stove, electric refrigerator, electric iron and electric lights. It was just wonderful. [Especially the] electric stove. Push that button and there you had heat. Didn't have to chop wood or carry coal to get some heat to cook on."[8]

For many Great Plains farm women, however, the acquisition of such appliances would not occur before World War II. As the REA reported in 1940, "electric service continues to be strongly regionalized even after more than three years of equalizing activity by the Rural Electrification Administration." Maps illustrating REA projects through 1 April 1940 showed mostly empty space for the area between the ninety-eighth meridian and the Rocky Mountains. A still depressed economy and the great distances between farms in the region had prevented further progress by the REA on the Great Plains. Statistics for 1939 showed that Kansas, Nebraska, North Dakota, and South Dakota ranked thirty-fifth, thirty-fourth, forty-eighth, and forty-sixth respectively in the REA's ranking of the forty-eight states according to the percentage of farms receiving central station electricity.[9] By 1940 the percentage of farm homes in these states using electric lights—primarily powered by their own home plants—ranged from 28.5 percent in Nebraska to 15.5 percent in North Dakota (Table 1).

# Hours SAVED *by the* Maytag Make MONEY *for the* Farmwife




*For homes with electricity, the Maytag is available with electric motor.*

THE time saved with a Maytag, if spent on a good flock of chickens or in other profitable ways, will pay for the washer. Many a Maytag has been purchased with egg money.

It will positively surprise you to see how quickly a big washing can be done with the Maytag—it practically changes washday to washhour. The seamless, lifetime, cast-aluminum tub holds four gallons more than ordinary washers, and washes everything clean without hand-rubbing, even the grimiest work-clothes.

The new Maytag has added to this well-known speed and thoroughness with a Soft-Roller Water Remover that spares the buttons, an automatic feed board, and other advantages exclusive to the Maytag.

## Gasoline Multi-Motor

For homes without electricity, the Maytag is equipped with the famous Maytag Gasoline Multi-Motor. It is a part of the washer—no belts to line up, compact as an electric motor, and a push of the foot lever starts it. This simple, dependable modern gasoline motor has brought washday happiness to thousands of farm homes.

## *free trial washing*

Do your next washing with a Maytag. There is no cost, no obligation, no influence other than the remarkable way in which it will wash for you, the speed with which it gets clothes clean, the remarkable freedom from hard work and long hours. Phone or write any Maytag dealer for an electric or a Multi-Motor Maytag. If it doesn't sell itself, don't keep it.

***Deferred Payments You'll Never Miss***

**THE MAYTAG COMPANY,**
***Newton, Iowa***
Founded 1894

NORTHWESTERN BRANCH:
815 Washington Ave. North, MINNEAPOLIS, MINN.

**Maytag Radio Programs**

W. H. T., Chicago, Tues., Wed. Thur., Fri., Sat. evenings, 9:00 to 9:30.
W. C. C. O., Minneapolis, Friday Evenings, 8:30 to 9:00.
W. H. O., Des Moines, Sunday Evenings, 7:15 to 7:45.
K. D. K. A., Pittsburgh, Tuesday and Wednesday evenings, 9:00 to 9:30.
W. B. A. P., Fort Worth, Monday evenings, 8:30 to 9:00.
K. E. X., Portland, Ore., Tuesday and Saturday evenings, 8:30 to 9:00.

*Hours designated are Standard time at the Stations Named*

*Look for these features when you try the New Maytag*

—Automatic-feed, Soft Roller Water Remover, which swings to seven positions and reverses. Does not crush buttons and has instant tension release which is the utmost in safety.
—Non-breakable, heat-retaining, life-lasting, cast-aluminum tub which cleans and empties itself.
—Quiet power-drive with precision-cut steel gears.
—A week's washing done in an hour.
—Tubfuls washed in 2 to 7 minutes.
—No hand-rubbing—even of cuffs and collars.
—Adjustable legs which raise or lower the tub to your height.
—Hinged cover which forms handy shelf when open.
—Scientific construction tested to insure perfect performance and reliability.
—Beautiful lacquer finish, sanitary and enduring.
—Lifetime washing service—the Maytag is the most durable washer made.

*One out of every three washers sold is a Maytag.*

F-3-28

**Maytag Aluminum Washer**

FIG. 2. *"Hours Saved by the Maytag...," advertisement,* Nebraska Farmer, *24 March 1928.* Courtesy of *Nebraska Farmer.*

### Role of Isolation on Need for Technology

In addition to the continued lack of a dependable domestic power source, farm women saw the area's sparse population and the resulting isolation of farm families as another major disadvantage of living on the Great Plains. In 1910 when the average population density for the United States as a whole was 30.9 persons per square mile, average density for the Great Plains fell far below that figure. Census records on population density for the 197 counties lying west of the ninety-eighth meridian in Kansas, Nebraska, North Dakota, and South Dakota show that eighty-six counties contained only six to eighteen persons per square mile, sixty-eight counties contained two to six persons per square mile, and twenty-three counties contained fewer than two persons per square mile. Statistics for the strictly rural areas of many of these counties demonstrated even lower population densities. This lack of population continued in the Great Plains throughout the period considered in this study with minor population gains between 1910 and 1930 and losses during the thirties.[10]

As a result of the sparse population, Great Plains farm women often voiced concerns about communication and transportation technologies. Their complaints and proposed solutions touched on a variety of issues. For example, some plainswomen felt that improved communication/transportation technology would benefit farm business on the Great Plains. A Nebraska woman wrote in 1913: "First of all we need railroads, so we can dispose of our products. The majority of the people are living from 20 to 30 miles from the nearest railroad station, and this is just the only reason why this country is a drawback, and looked upon as a worthless country."[11]

Other women saw the lack of social activity as the main drawback to life on the Great Plains. Commenting in the 1980s on her life as a young farm woman in western Nebraska, seventy-six-year-old Nellie Yost mentioned the difficulty she had had in attending church functions: "There was a church in Tryon, twelve miles away, and the roads were usually very bad. Even after we got the car, it was quite a struggle to get to Tryon over those sandy roads. In the winter you shoveled snow and in the summertime you shoveled sand.[12]

### Health Care

One of the concerns most frequently voiced about Great Plains isolation was directly related to the plainswoman's domestic role: concern over her family's health. Women wanted improved access to modern medical technology, a goal they saw hindered by the lack of efficient transportation to distant doctors and the lack of sufficient funds to pay for professional medical care. Several respondents to the USDA's 1913 survey made the complaint that on the plains, "the doctor is usually too far away and unreasonably expensive." In that same year, farm women in one North Dakota county considered forming a women's health organization that would meet once a month with a trained nurse to learn about health care measures the women could perform in their own homes. Other plainswomen called on the federal government to provide doctors and nurses in sparsely settled areas.[13]

In ensuing years the lack of adequate rural health care became a chief topic of discussion in the nation's farm life periodicals. In 1925 *Rural America* reported an American Medical Association finding that in some parts of the Great Plains a single doctor might serve a two thousand-square-mile area. The cost of quality medical care also remained a problem for many farm families. In the words of a Nebraska woman, the disparity between the cost of medical care and farm income in 1930 was the difference between "$16 doctor calls and eighty-cent wheat." In 1936 the American Hospital Association reported that rural road improvements had increased accessibility to health care for farm families but that the farm economy still could not support adequate rural

health facilities in many regions. The association reported that hospitals "particularly in Kansas, Nebraska, Oklahoma and adjacent states, have had a terrific struggle to keep open."[12]

Among the medical care problems that concerned plainswomen most was the issue of maternal health. A North Dakota woman summarized the situation in 1913: "The greatest need in our community, which is situated in prairie country, subjected to terrible blizzards, and with roads almost impassable or no roads at all, is rural nurses. Women on homesteads often die in childbirth and the lif of the little stranger is often lost also, becau of no doctor and no nurse. . . . we sometime have to go 30 or 40 miles to a doctor."[13]

With the passage of the Sheppard-Towner Act in 1921 the federal government attempted to address the needs of farm women for better maternity care by providing funds to be matched in part by the states for supporting visiting nurses in rural areas. Opposition by the American Medical Association, however, prevented renewal of the law in 1928. By the early 1930s, therefore, Great Plains farm women found their condition little better than it had been in 1913, as the experiences of North Dakotan Margaret Lien suggest. All five of her children were born in her farm home, but because the local doctor could not get there in time, four of the children were delivered by a midwife who traveled three and a half miles from her own farm. Following these births, Lien's husband, Ben, would travel five miles to the nearest telephone to call the doctor for postnatal treatment. According to Lien, "If [Dr. Hilts] was around, why fine. If he was out in the country, or busy with somebody else—well, we had to wait. But he would come. If it was summer he came by car. In the wintertime he would come by car as far as Sorlie's. Then he came to our place with a team sled." Payment for Dr. Hilts's services was thirty-five dollars, a fee that the Liens could not afford when their third child was born in December 1932. Dr. Hilts suggested that the family pay him with a butchered pig.


FIG. 3. "*Mohawk Radio*," *advertisement*, Nebraska Farmer, *17 September 1927*. Courtesy of *Nebraska Farmer*.

When Ben Lien went to deliver the pig, however, the doctor thought that it was worth more than thirty-five dollars and proposed another exchange. As Margaret Lien tells it, "he wanted to know if Ben would take that battery-operated radio he had. It was an old Zenith, and here Ben came home with the old radio. Dr. Hilts even bought a new battery. But, anyway, that was our first radio."[14]

## Importance of the Radio

This exchange of goods, services, and technologies demonstrates the difficulties inherent in obtaining professional health care on the Great Plains. But this anecdote also provides a larger picture of the communication and transportation problems that hampered

daily activities in the region and indicates why women on the Great Plains were eager to improve their communication technology. In fact, evidence suggests that some women were more eager to improve communication technology than to improve domestic technology. In the words of one farm woman of the era, "you can't go to town in a bathtub!" In 1939, sociologist Florence M. Swire puzzled over the "uneven diffusion of material culture . . . in the countryside. Automobiles and radios are not uncommonly possessed by families who have the crudest of outdoor privies and water supplied by bucket from well or stream." Statistics for Great Plains farm households show that this "uneven diffusion" of domestic and communication technologies was particularly apparent in the plains region. As the north-central plains state that in 1940 recorded the highest proportion of farm homes without running water (94 percent) and with outdoor privies (89.8 percent), North Dakota also recorded the highest proportion of farm homes with radios. In 1940, 87.2 percent of North Dakota farm families owned a radio (Table 2).[17]

Ironically, among the north-central plains states, North Dakota had been hit especially hard by the depression and drought of the twenties and thirties. For several years during the 1930s nearly a third of the state's population had been relief recipients. Hard times had particularly affected the farmers of North Dakota's western counties. In 1940 half the inhabitants of seven western counties received relief benefits. During this same period, North Dakota led the entire nation in the proportion of farm homes that had abandoned electrical service. Between 1934 and 1939, the number of electrified farms in the state had dropped 36.5 percent. The fact that the vast majority of North Dakota farm homes owned radios, even under these desperate conditions, indicates the important position that the radio had assumed within farm households. According to USDA officials, farm families were among the leading investors in radio equipment throughout the twenties and thirties. Although the cost of purchasing a radio could be substantial—the average price farm families paid for a radio in 1923 was $175—radio purchases by farm families did not decline significantly even during the depths of the agricultural depression. In fact, radio dealers reported that farm families tended to buy the more expensive, higher quality radio models because they had "discovered that they need good long-distance sets to get the weather and market reports and entertainment they demand."[18]

Even the best radios, however, remained less expensive than many other types of equipment that farm families desired. For

TABLE 2.
AVERAGE POPULATION DENSITY AND PERCENTAGE OF FARM HOUSEHOLDS OWNING RADIOS IN NORTH-CENTRAL PLAINS—1940

| | Persons per Square Mile | Farm Homes with Radios |
|---|---|---|
| Kansas | 21.9 | 73.2 |
| Nebraska | 17.2 | 76.7 |
| N. Dakota | 9.2 | 87.2 |
| S. Dakota | 8.4 | 81.7 |

SOURCES: United States Department of Commerce, Bureau of the Census, *Sixteenth Census of the United States, 1940: Population*, vol. 1 (Washington, D.C.: United States Government Printing Office, 1942); United States Department of Commerce, Bureau of the Census, *Sixteenth Census of the United States, 1940: Housing*, vol. 2, pts. 3, 4, 5 (Washington, D.C.: United States Government Printing Office, 1943).

example, in 1924 the cheapest models of quality basic plumbing fixtures—kitchen sink, bathroom sink, bathtub, and toilet—cost a total of $128 for the typical farm home. The least expensive 30-gallon water boiler cost $12, and the special tools necessary for self-installation of plumbing equipment cost $40. Installation of a farm plumbing system cost approximately $180—exclusive of the pumping equipment, pipes, and fittings that accounted for the major portion of a plumbing system investment. In 1939 a complete, self-installed farm plumbing system cost approximately $500. By that same year the price of a high-quality, battery-powered radio had fallen to $46.[19]

In the 1920s and 1930s, farm families had come to view the radio not only as an essential agricultural tool that provided valuable weather, crop, and livestock information but as a source of entertainment that helped connect the farm family to the outside world. That a radio could be run without electric wiring, that it was comparatively inexpensive, and that the whole family could benefit from and enjoy its use no doubt accounted for its popularity as an item of purchase. Evidence suggests that farm women greatly valued radio use. In 1930 one farm woman activist described the farm family's needs in descending order: "The farmer needs his radio just as much as the Board of Trade man needs his ticker. He also needs an automobile [and] needs a comfortable home with enough conveniences to make the homemaker's work a joy instead of a burden." Another farm spokeswoman of the era stated that with the arrival of radio in farm households, "finally . . . farm life began to be deeply satisfying."[20]

Radio use had a profound effect on farm women's lives. For example, sociologists found that farm women frequently organized their chores around the timing of popular radio programs. Additionally, the "traditional loneliness of farm women," wrote sociologist F. Howard Forsyth in 1939, "has been reduced by other recent changes, but none may be more significant than radio. Family care, homemaking practices, the use of time, a new affairs-consciousness, and other aspects within the farm home may show response to the broad diet of radio broadcasting."[21]

The radio could serve as the plainswoman's chief means of contact with the outside world at a time when her society still viewed the automobile as a male machine. Throughout the twenties and thirties, Great Plains farm families continued to consider the car as a machine used primarily for Saturday business trips to town. For many families, the only other function the car regularly served was to take the family to Sunday church services. Business and family needs obviously overrode those of individual women. Young farm women began to learn how to drive in the twenties and thirties, but even those who worked away from the farm home, such as rural school teachers, often had to rely on fathers or brothers to transport them between farm and workplace in the family car. According to one longtime Ford dealer in western Nebraska, although women did begin to advise male family members about car purchases by the late thirties, no woman in his rural community ever had use of her own car prior to World War II. Those farm women who did have greater access to family cars, such as one young western Nebraskan whose father taught her to drive so that he could lighten some of his own transportation burdens, often found rural roads unnavigable.[22]

Listening to the radio, on the other hand, did not require the farm woman to rely on favorable road conditions or the favors of male family members. Plainswomen could turn the radio dial to stations such as powerful KFKX in Hastings, Nebraska, which catered specifically to a rural audience. Listening to her own programs at times of the day when other family members were often absent, the farm woman could tune into extension service health and cooking programs as well as news and entertainment programming. By listening to the ecumenical "Radio Rural Church Service," broadcast from a powerful station at Kansas State Agricultural College, women could avoid the problems inherent in traveling

to church services. Another advantage that the radio had over the automobile was that a woman could perform at least some of her household chores while listening to the radio.[23]

Plainswomen also apparently found the radio to be superior to the telephone as a communication tool. In Nellie Yost's area of western Nebraska, the expense of extending telephone wires to widely spaced farm homes delayed the use of telephones in the area until many years after they had become commonplace in much of the rest of rural America. Radio, however, which did not rely on expensive wiring procedures, rapidly became a common piece of equipment on the plains, as it did elsewhere, after the inception of commercial broadcasting in 1920. One western Kansas farm woman, who was "addicted" to the religious programming she received on the family radio in the thirties, did not have a telephone in her home until 1970. Most plains farm households that did own telephones had party lines, which could discourage frequent use. On the other hand, a farm woman did not have to share her radio with her neighbors.[24] That plainswomen and their families viewed the radio as a major means of lessening their isolation is perhaps illustrated by the roughly inverse relationship between population density and radio ownership in the north-central plains area. In 1940, Kansas, the state with the highest average population density and the largest proportion of its surface area lying outside the sparsely populated plains region, had the smallest proportion of farm homes with radios—73.2 percent. On the opposite end of both scales stood North and South Dakota (Table 2).

## Conclusion

The situation of Great Plains farm women on the eve of World War II differed little from their circumstances thirty years earlier. Problems of finance and distance had prevented many women from electrifying their homes and using equipment commonly found in the cities and small towns of their region. Even for those women who did obtain such appliances, the labor-saving advantages often evaporated as women changed their housekeeping standards. As one report noted in 1930:

> Time set free by the use of household machinery . . . is used mainly to increase time devoted to the comfort-beauty aspects of homemaking. . . . The farm group who had neither electricity nor modern plumbing in their houses spent 3.3 hours a week more than those who had both of these utilities, on preparing and clearing away meals, cleaning and washing. The latter group spent 2.2 hours more than the former on ironing, sewing, care of children and care of house surroundings. That is, [with] the "modernizing" of the home . . . the homemaker uses that part of her time which it sets free, in those marginal activities for which she is constantly "trying to find time."[25]

On the plains this situation meant that in 1932, when a higher proportion of Nebraska women than South Dakota women lived in modernized farm homes, the average time that Nebraska farm women spent doing housework each day was 10.7 hours, while for women on South Dakota farms it was 9.4 hours. In other words, modern technology may actually have increased the time that plains farm women spent doing housework, a result consistent with the experience of urban women.[26]

On the other hand, new communication technology—in the form of radio—allowed for greater personal satisfaction and enhancement of self-esteem among plains farm women. For example, plainswomen in 1940 complained less than their mothers had about having "no society, no preaching" on the plains. Although modern household technology was not necessarily the "great liberator" it was purported to be, improved communication technology did have an impact on plainswomen's lives.

Nevertheless, many anticipated improvements in rural communication technology, as well as in household technology, awaited the


FIG. 4. *"Delco Light," advertisement*, Nebraska Farmer, *20 March 1920*. Courtesy of *Nebraska Farmer*.

postwar prosperity, liberalized REA policies, and paved roads of the 1940s and 1950s. Until that time, plainswomen continued to use their old equipment while maintaining their desire to acquire improved technology. When conditions following World War II finally allowed plains farm women to improve their technological lives, they did not hesitate to do so—even though at least some of the advantages they saw in modern technology were illusory. In the meantime, they took full advantage of the radio—the one piece of equipment whose use family politics, economic hardship, and sparse settlement on the plains did not prohibit.

## NOTES

1. United States Department of Agriculture, *Economic Needs of Farm Women* (Washington, D.C.: United States Government Printing Office, 1915), pp. 68–69.

2. "What's on the Farm Woman's Mind?," *Rural America*, June 1926, p. 3. For a discussion of the modernization of urban homes, see Ruth Schwartz Cowan, *More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave* (New York, N.Y.: Basic Books, 1983) and Susan Strasser, *Never Done: A History of American Housework* (New York, N.Y.: Pantheon Books, 1982).

3. Walter Prescott Webb, *The Great Plains* (Boston, Mass.: Ginn and Company, 1931), pp. 505–06. Glenda Riley presents a good overview of the literature on Great Plains women in "Women on the Great Plains: Recent Developments in Research," *Great Plains Quarterly* 5 (Spring 1985): 81–92.

4. USDA, *Economic Needs*, p. 15. The department's survey targeted the wives of progressive farmers—USDA volunteer crop correspondents—in an attempt to receive feedback from those women who were supposedly the best informed members of their farming communities. The department requested that respondents submit descriptive letters about their experiences as farm women and also include information on the status and opinions of their neighbors and acquaintances in women's clubs, granges, and churches. Based on the 2,241 replies that it received from women throughout the country, the USDA began publishing its summaries of the survey results in 1915. This information helped define farm women's needs and aided the newly established farm and home extension services in developing their programs to assist farm families. Unfortunately, the original replies to the survey have been lost.

5. United States Department of Agriculture, *Domestic Needs of Farm Women* (Washington, D. C.: United States Government Printing Office, 1915), p. 40.

6. Ibid., pp. 40–41.

7. Ibid., p. 33.

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